MARASTOLONY (HELMINTHOLONY).

STHOMES FARM.

MATFIELD ROAD.

T. ALBANS, HERTS

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29.8.53.

# THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of

# THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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# BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 10, Parts 3/5 (pp. 61-166)

23rd July, 1953

# CASE No. 5

# DOCUMENTS RELEVANT TO THE CONSIDERATION OF THE PROBLEM OF THE EMENDATION OF NAMES

# DOCUMENT 5/1

# ORIGIN OF THE PRESENT INVESTIGATION

The present investigation into the problem of the emendation of zoological names was undertaken in response to a request addressed to the Secretary to the International Commission on Zoological Nomenclature at Paris in July, 1948, when, after considering problems arising in connection with the consolidation into the Règles of interpretations of Article 19 given in certain of the Opinions previously rendered, the International Commission on Zoological Nomenclature agreed to recommend (1950, Bull. zool. Nomencl. 4: 141):—

- "(1) that the Secretary to the Commission should be invited to make a thorough study, in consultation with interested specialists, of the problems involved in the emendation of scientific names which, when originally published, contained errors of transcription or of orthography or printers' errors and to submit a Report thereon, with recommendations, for consideration by the Commission at their meeting to be held during the next (XIVth) meeting of the Congress, with a view to the submission by the Commission of proposals for the insertion in the Règles of comprehensive provisions dealing with this subject."
- 2. The foregoing recommendation, with other recommendations, was submitted to, and approved by, the Section on Nomenclature of the Thirteenth International Congress of Zoology at its Second Meeting held on 24th July, 1948 (1950, Bull. zool. Nomencl. 5: 67, 76).

# GENERAL CONSULTATION WITH SPECIALISTS AND ISSUE OF AN APPEAL FOR ADVICE IN 1952

Editorial Note: Attention is drawn to the review by the Secretary to the International Commission on Zoological Nomenclature of the problems involved in the emendation of zoological names which was published in March, 1952 (Bull. zool. Nomencl. 7: 4–59). This review contained an appeal to specialists to assist in the present investigation by furnishing statements of their views on the action which it was desirable should be taken. It was in response to this appeal that the majority of the documents now submitted was furnished.

#### By RAYMOND C. MOORE

(University of Kansas, Lawrence, U.S.A.)

Letter, dated 5th February, 1947

# OBJECTION TO THE EMENDATION OF NAMES ON ETYMOLOGICAL GROUNDS

This letter is written to raise question concerning the validity under the International Rules of orthographic emendation by Lang, Smith and Thomas ("Index of Palaeozoic Coral Genera", Brit. Mus., p. 1–231, 1940) of some 69 generic names of Paleozoic corals out of 564 such genera recognized by them, all or virtually all such changes in spelling being on etymological grounds. Examples are Aenignatophyllum L. S. & T., 1940, for Enygmophyllum Fomichev, 1931; Polydiselasma L. S. & T., 1940, for Polydilasma Hall, 1851; and Strobilelesma L. S. & T., 1940, for Strobilasma Scheffen, 1933.

Is faulty transliteration of Greek roots by an original author of a generic name construed to be "une faute de transcription" or "d'orthographe" according to Article 19 of the Règles? Various Opinions of the Commission seem unequivocally to indicate that failure on the part of an author to follow procedure recommended in Appendix F for transliteration of Greek letters does not constitute an infringement of the Rules. Opinion 76 gives no hint that Oikopleura must be written Oecopleura; Opinion 81 cites Clinophilus 1903 as a junior synonym of Klinophilos 1899; Opinion 125 declares that Boros 1797 cannot be emended legally to Borus as was attempted by Agassiz in 1846 on etymological basis presumably. Commissioner Richter (1943. Senckenb. Nat. Ges., "Einfuhrung in die zoologische Nomenklatur", p. 86) says: "Anderungen nur deswegen vorzunehmen, weil die Transliteration von griechischen Buchstaben nicht auf die Anhang F empfohlene, aber nicht vorgeschriebene Weise vorgenommen worden ist, hat die Kommission abgelehnt". Richter's comment on Opinion 125 therewith published is also pertinent.

It is confusing and disturbing, then, to read your discussion and see your volte-face in the case of Sphingonothus vs. Sphingonotus (Opinions etc., vol. 2, pt. 30A, p. (17), 1945). Here the conclusion is reached that "Sphingonothus" represents an error of orthography and accordingly emendation to "Sphingonotus" is judged valid. I may note parenthetically that no evidence seems to have been submitted to show that the original publication of Sphingonothus (1852) contains within itself internal evidence of a misprint or other cause for emendation under Article 19, and if it is true that no such evidence exists, Opinion 34 declares that the originally published spelling must stand.

An important question that seems to be quite unanswered as vet, is definition of what constitutes a "faute d'orthographe" in the meaning of the Rules. The reasoning given in accepting Sphingonotus is surely not less applicable as support for the many (decidedly unsettling) emendations of coral genera by Lang, Smith and Thomas. In scholarly manner these authors have correctly transliterated Greek roots, used proper classical connectives, and otherwise achieved flawless orthography, whereas original authors of many generic names of corals made errors (or we judge that they did). It is certainly possible, however, to make more than one "correct" emendation of some names, root terms being unspecified. A strong reason, it seems to me, for objecting to any alteration of generic names in this manner is its disturbing effect on already published generic names that have validity under the Rules and that occupy the role of innocent bystanders. For example, Lang, Smith and Thomas find that some emended spellings introduced by them conflict with a previously proposed name, which they then conclude must be discarded as a homonym. Thus, Arachnophyllum Dana, 1846, is altered to Arachniophyllum Lang, Smith & Thomas, 1940, which conflicts with Arachniophyllum Smyth, 1915 and they suppress the latter (incorrectly, I think) as a homonym of Dana's generic name. Should we not recognize Arachnophyllum Dana and Arachniophullum Smyth despite their similarity (assuming each is available under the Rules) inasmuch as the names apply to entirely different corals? Arachniophyllum Lang, Smith & Thomas, 1940 constitutes an invalid junior homonym of Smyth's Arachniophyllum 1915.

Many American paleontologists are interested in the nomenclatorial problem that is illustrated by the emendations cited in this letter. Your assistance in resolving the problem definitively is solicited.

Professor PIERRE BONNET'S proposal regarding the spelling to be adopted for a word for which more than one spelling is in use

# Note by the Secretary

Editorial Note: Attention is drawn to the proposition No. 10 submitted by Professor Pierre Bonnet at Paris in 1948. This proposal was published in the present serial publication in 1950 (Bull. zool. Nomencl. 3: 190).

The proposal submitted by Professor Bonnet was that there should be inserted in the *Règles* a new Article (Article 20bis) which would read as follows:—

Article 20bis.—Polymorphisme de cartains mots. Si certains mots ont été écrits de plusieurs façons on doit adopter cette qui a une priorité originelle. Exemples : silva non silva ; tirol non tyrol ; littoralis non litoralis ; caeruleus non coeruleus et surtout non ceruleus ; sulfur non sulphur ; compta non comta ; hibernalis non hybernalis ; pirum non pyrum.

# By the late LODOVICO DI CAPORIACCO

(University of Parma, Italy)

Statement, dated 15th January, 1948

## COMMENT UPON PROFESSOR P. BONNET'S PROPOSITION No. 10

In his Proposal No. 10,\* Professor P. Bonnet recommends the addition to the *Règles* of a new Article (Article 20bis) providing that, if a name is spelt by different authors in different ways, the spelling to be used is that employed in the original publication.

With this proposal I am in full agreement for the sake of uniformity.

<sup>\*</sup> See Document D. 5/4.

# PROPOSALS IN A REPORT BY A SUB-COMMITTEE OF THE SMITHSONIAN INSTITUTION COMMITTEE ON ZOOLOGICAL NOMENCLATURE PUBLISHED IN JULY, 1948

Editorial Note: Attention is drawn to the fact that in July, 1948 (Science 108 (No. 2793): 37–38) there was published a Report containing proposals for the amendment and clarification of Article 19 of the Règles prepared by a Sub-Committee of the Smithsonian Institution Committee on Zoological Nomenclature. The final draft of the foregoing document was communicated to the International Commission on Zoological Nomenclature in 1948 under cover of a letter (dated 7th July, 1948) from Dr. Richard E. Blackwelder.

2. The foregoing Report was submitted to the International Commission in 1952 in a slightly revised form (under cover of a letter dated 16th July, 1952, signed by Dr. Blackwelder) by the Nomenclature Discussion Group, Washington (the reconstituted form of the previous Smithsonian Institution Committee). As so submitted, the Report referred to above is reproduced in the present Series as Annexe 2 to Document 5/30.

By JOSHUA L. BAILY, Jr. (San Diego, California, U.S.A.)

Letter dated 29th July, 1948

COMMENT ON THE PROPOSALS BROUGHT FORWARD BY A SUB-COMMITTEE OF THE SMITHSONIAN INSTITUTION COMMITTEE ON ZOOLOGICAL NOMENCLATURE IN 1948

Editorial Note: The paper published in Science referred to by Mr. Baily in the following letter is the Report by a Sub-Committee of the Smithsonian Institution Committee on Zoological Nomenclature referred to in Document 5/6.

In the issue of Science for 9th July, 1948 there is an announcement of a proposed change in rules in Articles 19 and 20, with the request that taxonomists write you to express their views on the proposed changes. I take it that these proposed changes will be published in the Bulletin before they are acted upon, but inasmuch as they have already appeared in Science it would seem preferable for anyone feeling as strongly as I do to write at once.

In the case of Article 19 dealing with the use of diacritical marks I feel that it is preferable not to have optional spellings. Every word should have one correct form which should be adhered to. However, no final action should be taken precipitously because the question as to what the best orthography would be for special cases is one of very great complexity.

The function of diacritical marks\* is to modify the sound or the significance of a letter so as to differentiate it from the same letter without the diacritical marks. The effect of authorising optional forms would be to neutralize the value of the diacritical mark, and this could best be done by ruling them out altogether. But I am not sure that it is practical to rule out all diacritical marks.

Another thing which must be remembered is that the same diacritical mark may mean different things in different languages. The umlaut in German is the same symbol as the diaeresis in the Roman languages, but it indicates a different modification of the vowel over which it is placed. Since scientific names are written in Latin it would seem logical to use this symbol as a diaeresis and not an umlaut. An alternative form for the umlaut is the addition of the vowel "e" as in the name Müller which may be spelled also Mueller. The objection to this orthography is the same. The vowel combination "ae" has a different meaning and a different sound in Latin than it has in

<sup>\*</sup> See Document 5/17.

German, and the Latin use should be preserved. This leaves a need for some other way of transliterating the modified German vowels. This might be done merely by dropping the umlaut altogether, but I am not sure that it would be advisable to drop all diacritical marks of all other languages without first devising something to take their places.

My feeling is that as long as Latin is used for scientific nomenclature the Latin rules, either of classical Latin, or of Neo-Latin should be adhered to. Also, since the true word is not a combination of printed marks on a paper but a spoken sound, that the scientific name be spelled phonetically, and the great advantage of the Latin language is that it is a phonetic language and has but one spelling for each sound and but one sound for each spelling. In this respect it is very unlike English where the letter "a" may have as many as nine different sounds, maybe more, and which makes English orthography so difficult. The advantage of Latin for scientific purposes is obvious. But this advantage is completely lost because scholars insist on pronouncing Latin names as if they were names in the language which they use for ordinary conversation. My Spanish friends pronounce scientific names as if they were Spanish words, my German friends pronounce them as if they were German. The Italian pronunciation of the ecclesiastical ritual is used by the Roman Catholic Church. The International Commission should make a ruling similar to the rulings made by the Spanish, French and Italian Academies, specifying how each letter and combination of letters should be pronounced, and the names should then be spelled phonetically.

In the case of names originating in Latin with Latin roots this will not necessitate any changes of orthography, but in those names originating in those languages which use diacritical marks it will make it necessary either to retain the diacritical marks or to alter the spelling to make its pronunciation phonetic. If the correct pronunciation of the names is one which cannot be spelled phonetically in Latin then it will be necessary either for the International Commission to suspend the rules by adopting the diacritical marks into Latin (which cannot always be done, as hereinabove explained) or by devising certain new combinations of letters to represent the sounds.

For instance, the letter "ll" in Spanish is not a single "l" repeated, but a different letter, with a different sound. It is the same sound that is represented by "gl" in Italian, and by "lh" in Portuguese. There is no good reason why names derived from these languages should be spelled etymologically. It would be far better to spell them phonetically, and in this case the "ll" of Spanish could be represented by "li" or "ly" in scientific Latin. If all the sounds of modern languages were tabulated and a corresponding spelling devised for their Latinization the problem of diacritical marks would vanish automatically. But it would take a scholar who was both a zoologist and a philologist. I know only one such person in this country. Certainly I could not do it myself, but I would be glad to try to help. This will be a long

process but it can be done and should be done. First, the pronunciation of scientific Latin should be established, then the representation of words derived from foreign roots should be established on a phonetic basis.

The use of such names as X-us 10-maculatus are a convenience on manuscript labels, but they should not be authorized as an alternative form in publications. And this brings up another matter which the article in Science avoided. The International Commission has ruled that hyphenated names are not available in their entirety but that only the latter element may be used. Thus a species named after Milne-Edwards should be called X-us edwards and not X-us milne-edwards.

Does this establish a precedent for the name X-us C-B-Adamsi? Personally I think it does. This species should be called X-us adamsi. And how about the names X-us fredbakeri or X-us maxwellsmithi? I think these names could be allowed to stand because they are pronounceable. I would be opposed to such names as X-us f-bakeri or X-us msmithi.

The suggested new form of Article 20 is all right in so far as it is consistent with the views which I have expressed above. But much of it is inconsistent, as it allows for alternative forms of the same name, and also does away with diacritical marks without replacing them with something else. Both these Articles are defective in that they seem to assume that the printed letters on the page constitute the word. They do not. The word is the sound. No attempt should be made to legislate on the orthography until the pronunciation has been standardized.

By JOSHUA L. BAILY, Jr. (San Diego, California, U.S.A.)

Extract from a letter dated 20th April, 1950

# ON THE PRINCIPLES WHICH SHOULD GOVERN THE SPELLING OF NAMES

Some time ago I submitted an application which I have since withdrawn for the changing of the name "Mangelia" to "Mangilia" on the ground that this genus was named for Mangili. My authority for this statement was derived from comments made by later writers. When finally I was able to consult the original sources, I found that not only did the original author say nothing about the etymology of the name, but even the authority who devised the amended spelling gave no reason for doing so. The two forms had both been in use many years before anyone thought to explain them by bringing Mangili into the controversy. In addition, I have since learned that there was an investigator named Mangel, and that it is not impossible that this genus was named for him. Further, compounds of this name have since been published, among them Clathromangelia and Typhlomangelia, and to alter the spelling of the original name would imply an alteration of the derivatives as well. I now feel that the name should be retained in the form "Mangelia" and since that can be done without changing the rules or suspending them under plenary power, I make no application at present, though I suspect that this question may come up again later, as I think the genus is of sufficient importance to be placed on the Official List, and when that is done the Commission will probably wish to go into the matter of spelling.

As I said, the fact that I am probably the one who first raised this matter and have now changed my stand in regard to it makes it incumbent upon me to explain my present views. I am concerned here not with cases where the presence of an error can be detected from the original publication but with cases where the changes in spelling may be the deliberate intention of the original author. For instance, in the specific name *Polinices reclusiana* Deshayes, the trivial name was given in honour of Recluz, and the application of the principles enunciated in paragraph (a) would compel the spelling to be changed accordingly. During the latter part of the nineteenth century the spelling with the "Z" was more popular than that with the "S" but today popular taste seems to be in favour of the original spelling. In this instance the original spelling was not a typographical error as might be supposed

but the deliberate intention of the proposer, who believed that the letter "Z" should be confined to words of Greek origin. Perhaps some members of the Commission will think that this is a bad rule, and it may be, but nevertheless it is a rule, and to restore the spelling with the "Z" would be in conflict with the intention of Deshayes.

I feel that in many instances it is wise to depart from the original spelling. The advantage of the Latin language, or at least one of them, is that it is nearly exactly phonetic, and should be kept so as far as possible in order to enable people of different languages to understand each other. Yet this advantage is quite completely ignored by almost everyone whom I know. My friends in Mexico and Cuba pronounce these words as if they were pronouncing Spanish names. I should think they would find this a great inconvenience since there are such wide divergencies in the way in which Spanish is spoken in Spain and in Latin America. There are even great differences in pronunciation between Mexico and Argentina. Another friend of mine, a displaced person from Vienna, tells me that there are two outstanding Universities in Austria which differ in the ways in which they pronounce classical languages. Another friend of mine with whom I discuss such questions, tells me that Oxford and Cambridge Universities use different systems of pronunciation. In this country we use three different ways of pronouncing Latin. The scientists pronounce them as if they were English words, the Roman Catholic Church pronounces them as if they were modern Italian words, and the preparatory schools use what they believe to have been the pronunciation used by educated Roman citizens of the Augustan period. I make no defence of any of these systems, but I feel that the practice of using different systems is indefensible, and that scientific people should agree on a common system and then stick to it.

A scientific name is not a group of symbols on a printed page, but a sound apprehended by the ear. The spelling of such a name should be that one which preserves the original pronunciation. When Linnaeus instituted his system of naming, nearly all names were Latin words, but since that time the practice of Latinizing names from other languages has been introduced. This was, of course, inevitable, and is not a bad thing. But when it is done, the spelling used should be capable of only one pronunciation and that should be the correct one.

For instance, in the Cyrillic alphabet there are three different sounds, all denoted by different characters, which in English transliterations are represented by one letter—Z. One of these has the sound of "Z" as in "Zebra", one has the sound of the combination tz in the proper names "Fitz" and "Schwartz", and one has the sound of the "Z" in "azure" or the "S" in "pleasure". The famous Russian geneticist Dobzhansky, who now resides in the United States, represents the transliteration of this sound into English by "zh", and it appears to me that, when foreign names from any language are transliterated into Latin, these combinations might well be used to represent these sounds, regardless of how the words were spelled in the original languages.

A similar situation exists with respect to the combination "Ch" in various European languages. The sound which it has in French is represented in English by Sh, and the sound which it has in Spanish is represented by "tsh", though this combination is not used in English. The combination "Ch" in English as in "Church" is the same sound, but it is altogether different from the sound accorded this combination in German which is a fricatized guttural. In English we use the same combination in such words as "Chorus" where it has the sound of "K". The reason that so many English letters have different sounds is, of course, that so many foreign languages have contributed to English, but that is no reason why English spelling should not be made phonetic. I am an advocate of simplifying the orthography of the English language, but I do not advocate it strenuously because I believe that it would get us nowhere to attempt it. English-speaking people are notoriously conservative, despite the various ways in which they pronounce the same word in different places. I have another friend who is an Englishman, who has prepared a list of words that are pronounced differently in this country from the way in which you pronounce them and it is a most interesting list.

I said above that "Ch" in German was a fricatized guttural. We do not have any fricatized gutturals in English, but we have fricatized labials and dentals which we spell in very inconsistent ways. We sometimes fricatize the letter "P" by adding "h" to it. This gives us the totally unnecessary duplication of the sound of "F". In some fields of science the objection to such forced spelling is recognized, and the modern tendency to substitute the spelling "Sulfur" for the more archaic "Sulphur" is to be commended. My Spanish-speaking friends spell the name of the city where I was born like this—Filadelfia. I think that is an improvement. We spell all such words as come directly from Greek with "Ph", but if such a word is introduced into English indirectly through Russian, we spell it with an "F". There is no reason that I can see for not spelling this sound in all scientific works with "F". And in this connection, note that we do not fricatize "B" in this way. The fricatized "B" is always represented in English by "V", except in a few words (and I am not even sure of this) from Sanscrit. We also use the "H" to fricatize "T", but we are quite inconsistent in using the combination "Th" to represent not only the fricatization of "T" but also of "D". The sound of "Th" in "There" should be spelled "Dh".

One might go on indefinitely in this way. One might speak of the many cases in which French words end with a silent letter. Such a letter, I believe, should always be omitted in Latinizations of French words. In English we have many silent letters also. I was recently shocked by coming across a Latinized English name Wrightudora. This is a subgenus of Tudora named in honour of a man named Wright. Now the name Wright is a particularly good example of the futility of attempting to preserve the orthography of foreign words in Latin transliterations. Of its six letters, three are silent, and the vowel represents a diphthong. It would have been much better if the three silent letters had been omitted and the vowel replaced by two vowels. The name

would then have been Raitudora in mediaeval Latin or Raetudora in classical Latin. It may be said that no one would recognize the name Wright in the phonetic spellings "Rait" or "Raet", but then neither would one recognize it if one heard it pronounced phonetically by a German or by a Scotchman. The spelling of the Latinization should not conform to the original spelling but should give a pronunciation that conforms with the original pronunciation. In the case of barbaric languages which have sounds that are so difficult of pronunciation that they cannot be pronounced accurately by those of the white race, this rule would have to be somewhat relaxed, but in such cases there is likely not to be an alphabet, or at least not a Latin alphabet, so that the names would have to be transliterated anyhow, and the possibility of retaining the original spelling would not arise.

I would like to request therefore, that for the present no ruling be laid down, but that attention should be called to the need of a ruling. Then an attempt should be made to provide a schedule for the transliteration of all sounds in modern European languages into Scientific Latin. This would be a great task but one that is urgently needed. I must confess that I know of no one in this country that is competent to prepare such a schedule, but you have in England one man who is eminently qualified—I refer of course, to Professor Needham, who is a student of philology and linguistics as well as of zoology. Also a few years ago you had another in Scotland—Dr. D'Arcy W. Thompson, who could have done it.

When such a schedule is prepared, it may be found that the English alphabet does not supply a sufficient number of combinations of letters to represent all the sounds. If this is the case, some of the sounds might be arbitrarily suppressed, and represented by other sounds as nearly like them as possible. Or diacritical marks could be resorted to. This must be done with caution, however, as the same diacritical marks may be used in different languages to mean different things. For instance, the two dots placed over a vowel may be a diaeresis or an umlaut. And the diaeresis in Latin means a very different thing from what it does in Spanish, and the umlaut in German means a very different thing from what it does in Danish, so that this symbol has at least four different meanings.

Please pardon me for writing such a voluminous letter. It is submitted for serious consideration of your Commission.

By JOHN T. ZIMMER (The American Museum of Natural History, New York)

Letter dated 28th February, 1951

I have seen your recent call for expressions of opinion regarding Article 19 of the International Code. I may say that I am opposed to wholesale emendations based on a subsequent author's concept of what the original author should have done. This includes some of the action at the Paris Congress where emendations are authorized under several circumstances that open the way to differences of opinion and may lead to a series of emendations such as were made in early years of taxonomy. Synonymy is stuffed with changes in spelling because someone or other thought words were not strictly classical or were otherwise mis-spelled when, for all they could prove, the original author may have known that his spelling was different from that used by others but preferred it that way.

I am willing to admit emendation when the classical or vernacular origin of a name is stated in the original account or where the person or place is similarly noted, but the emendation should not be allowed to attempt to modernize names or change spelling beyond the point necessary to agree with the author's spelling of the base name. If the author does not give the source of the name, it should remain as he spelled it, however obviously wrong, until the Commission can rule on it. An exception is where a mis-spelled name is repeated elsewhere in the text or index or on an accompanying plate in the correct spelling. Consistent mis-spelling of adopted names and their antecedents should go to the Commission, not be emended by any or everyone.

- (1) Lacerta Stincus Linnaeus may be emended to scincus, a name cited in synonymy.
- (2) Lipangus Boie, emended to Lipangus; origin given by Boie as λιπαυγος.
- (3) Hirundo acquitorialis should be aequatorialis; said to be from Ecuador.
- (4) Camptostoma obsoletum maronica should be maranonica as elsewhere in the text.
- (5) Mimus columbianus is not to be changed to colombianus; noted as from "Columbia."
- (6) Motacilla Pensylvanica not to be pennsylvanica; cited as from "Pensylvania".
- (7) Coeligena Warszewizii not to be warszewiczii; collector given as Warszewiz.
- (8) Myiarchus bahiae not to be baiae as the modern locality name would suggest.
- (9) Tringa Ochrophus obviously an error for ochropus although Ochrophus is cited in synonymy, also erroneously; Commission action necessary.\*

The only safe plan, I believe, is to maintain original spellings unless a true lapsus is demonstrable from the original account. In all other cases, demand Commission action.

<sup>\*</sup> See application on this subject by the Standing Committee on Ornithological Nomenclature of the International Ornithological Congress (1952, Bull. 2001. Nomencl., 9: 52.)

By CESARE EMILIANI (University of Chicago, Illinois, U.S.A.)

Statement received on 4th April, 1951

# PROBLEMS OF GRAMMAR AND NOMENCLATURE

#### I.—Introduction

Today, more than ever before, a student of the biological sciences finds it difficult to follow both nomenclatural and grammatical rules. Increasing disregard for the classical languages, particularly in the United States, Russia and the Orient, is largely responsible.

- 2. Taxonomic rules state in essence that:
  - (1) Nomenclature must use the Latin language.
  - (2) An organism is known by a generic and a specific name (possibly also a subgeneric and a subspecific name).
  - (3) These names may be natural or artificial words.
  - (4) Generic names must be used as substantives.
  - (5) Specific adjectives (and presumably participles and pronouns) must conform in gender to the generic name to which they are attached.
- 3. Three main problems originate from these rules:
  - (1) Substantives; adjectives, participles, and pronouns; other parts of speech; and artificial words, must be distinguished.
  - (2) Gender of generic names must be determined.
  - (3) Specific adjectives, participles, and pronouns must be given the proper gender ending.
- 4. Several authors in recent years have proposed different solutions to these problems. McAtee (1929) suggested that "generic and subordinate names... shall be regarded... as arbitrary combinations of letters" and therefore, except for proved typographical errors, remain as the first author used them, Guba and Linder (1932) proposed to keep unchanged the original spellings even if erroneous. Blackwelder (1941) repeated suggestions previously made by Carsey (1890) for determining the gender of generic names by their endings, and published lists of endings for these determinations. Richter recommended that all specific substantives with -us (or -er), -a and -um endings, and all specific adjectives, should be used in the feminine form (Richter, 1942; Weller, 1950; Bartenstein, 1950).

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- 5. Other authors have made occasional reference to these problems, often publishing partly incorrect statements. Thus Baker (1929) reported that Zonitoides should be masculine; Macfadyen and Kenny (1934) and Thalmann (1950) classified as masculine all names ending in -ides, -ites, and -oides; and Bartenstein (1950) concluded that endings in -ites, -on, and -opsis indicate the masculine.
- 6. Some of the suggestions that have been made (McAtee, 1929; Guba and Linder, 1932), if accepted, would increase the difficulties of nomenclature, because both specific names and their particular endings would have to be remembered. Blackwelder's lists are very treacherous, because there are exceptions to all such generalities. Richter has not solved these problems either because substantives, adjectives, participles, and pronouns must still be identified and proper handling of the feminine form is required. Also his suggestion that all substantives with endings in -us (or -er), -a and -um be used in the feminine form, if applied to words that are exclusively substantives, would be likely to create new names and thus add to the confusion.
- 7. All the foregoing suggestions aim at avoiding the difficulties of Latin grammar. It is the opinion of the writer that, if the Latin language is used, it is impossible to ignore its rules; and that a strict observance of these rules is really not so difficult and offers the most convenient solution to the whole problem.
- 8. Students are inclined to spend much time checking earlier authors to resolve nomenclatorial doubts. A quicker and safer course is to consult good Latin and Greek dictionaries. Some of the best are: Forcellini: Totius Latinitatis Lexicon; De-Vit: Totius Latinitatis Onomasticon; Estennes: Thesaurus Graecae Linguae. A rational use of dictionaries and the few suggestions that follow, will help to solve most controversial issues definitely. The exceptions that may occur, do not impair the procedure.

#### II.-Generic Names

#### A-If generic name is a substantive

#### (1) Simple or compounds substantives.

ex: Arca, Asperitas, Aulocaulis, Battus, Chiton, Cyphosoma, Dictyonema, Homotrema, Lagena, Murex, Orthoceras, Tetrataxis, Venus. Gender may be determined from dictionaries. Only the last parts of compound names need to be considered.

(2) Simple or compound substantives with diminutive suffixes -lus, -a, um; -ulus, -a, -um; -culus, -a, -um; -unculus, -a, -um; -inus, -a, -um; -ellus, -a, -um; -illus, -a, -um; -olus -a, -um. Ex.: Atrypina, Atrypella, Avicula, Modiolus, Pectunculus, Scutella, Vulvulina, Asanoina, Cushmanella, Haeckelina, Paalzowella, Schubertella, Wiesnerella. Gender is determined by endings. Many words having these endings are not diminutive forms, and dictionaries should be consulted in all cases of doubt. Barbaric names (Asanoina, Cushmanella, Haeckelina, etc.) should be easily recognizable.

#### B—If generic name is a substantivized adjective or participle

- (1) Simple or compound adjectives or participles with three endings (in Latin mostly -us or -er, m.; -a, f.; -um, n.; in Greek mostly -os, m.; - $\eta$ , f.; -ov, n.). Ex.: Ammospirata, Arctica, Blainvillea, Bronteus, Carpenteria, Composita, Entosolenia, Flintia, Indiana, Metagraulos, Michelinia, Valvata, Viviparus. Gender is determined by ending.
- (2) Simple or compound adjectives with two endings (in Latin -is, m. and f.; -e, n.; in Greek -os, - $\omega v$ , - $\omega s$ , - $\eta s$ , - $\iota s$ , - $\upsilon s$ , m. and f.; -o $\iota v$ , - $\omega v$ , - $\epsilon s$ , - $\iota$ , - $\upsilon$ , n. Ex.: Daiphron, Epelys, Monoceros, Vorticialis. These names have one ending for masculine and feminine, and another for neuter. Note that since the Greek endings -o $\iota v$ , - $\omega v$ , and - $\eta s$ , - $\epsilon s$ , are transliterated into Latin simply as -on, and -es, transliterated names of this type do not indicate any particular gender. Greek adjectives with two endings, -os, m. and f., and -o $\iota v$ , n., assume three endings in Latin. Ex.:  $\dot{\alpha} \iota \alpha \lambda o \gamma o s$ , -o $\iota v$ , becomes analogous, a, um;  $\beta \alpha \rho \beta \alpha \rho o s$ , -o $\iota v$ , becomes barbarus, a, um.

- (3) Simple or compound adjectives and participles with one ending (various types).
- a. Names that may be indifferently masculine, feminine, or neuter. Ex.; Anomalinoides, Trochamminoides, most classical and all post-classical names with the same ending. The adjectival character of these names is evident. The Latin ending -oides derives from the Greek neuter word  $\tau \delta$  eldos, meaning "image, shape". Greek compounds with eldos are usually adjectives with two endings ( $\mathring{a}\epsilon\rhoo\epsilon\iota\delta\mathring{\eta}s$ ,  $\epsilon s$ ;  $\sigma\eta\sigma\alpha\muo\epsilon\iota\delta\eta s$ ,  $\epsilon s$ . Some of these names were substantivized as neuter nouns ( $\tau \delta$   $\sigma\phi\alpha\iota\rhoo\epsilon\iota\delta\acute{\epsilon}s$ ). Latin equivalents are usually adjectives with one ending (rhythmoides). Very rarely Latin names of this type were substantivized, either as masculine (aeroides, ae), feminine (sphaeroides, is), or neuter (sesamoides, is).
- b. Names that may be only masculine or feminine. Ex.: Apus, Harpax, Monyx, Calliops, Ogygopsis, most classical and all post-classical names in -ops and -opsis derived from the Greek words ὄψ, ὤψ, and ὄψις. these names are compounds ending with a substantive. Names derived from  $\delta\psi$ ,  $\delta\psi$ , and  $\delta\psi\iota_S$  need special consideration, because a very great number of post-classical names of this type are used in nomenclature. Their adjectival character should be obvious. The words  $\dot{\eta}$   $\check{o}\psi$  ("eye, face"; also "voice") and  $\dot{\eta}$  (sometimes  $\dot{\delta}$  )  $\ddot{\omega}\psi$  ("eye, face") are used as endings for a large number of Greek adjectives bearing the idea of "look, appearance" (aldow, fiery looking; ἀλαώ $\psi$ , blind-eyed;  $\mu\dot{\eta}$ λο $\psi$ , looking like an apple;  $\mu$ ονώ $\psi$ ,  $\phi$ αινοψ, bright-eyed;  $\phi$ λογώψ, one-eyed; fiery looking; glad-eyed). Very rarely these have been substantivized (Κύκλωψ, Cyclops). Latin equivalents may be adjectives (myops) or substantives of masculine (Cyclops) or feminine (Cynops) gender. Also the Greek word ή ὄψις ("look, appearance") has been used as an ending for a number of compound adjectives (μακαρόψις, with a long face; φακόψις with freckles on the face). If substantives, names of this type are feminine both in Greek and Latin (ή διόψις, ή συνοψις; synopsis). Many Greek names ending in -oψ,  $-\omega\psi$ , or  $-o\psi\iota_s$ , and their Latin correspondents are not related to the words  $\delta \psi$ ,  $\delta \psi$ , or  $\delta \psi \iota \varsigma$ , but have different etymologies and genders. Use of dictionaries is necessary to distinguish them.
- C. Adjectives that may be of only one gender. Ex.: Gennadas (masculine); Hyalopsis, Monopis (feminine).

Names of types 2 and 3 have caused the greatest confusion in nomenclature, because their genders are very often indeterminate. It would be most helpful if these were established by convention. This can be done easily if these names are thought of as referring to the word forma (or concha for shelled animals). Thus their genders would be established as feminine. Names that may be either substantives or adjectives (Tribon) should be interpreted as substantives, to agree with the substantival character of the generic name.

#### C-If generic name is another part of speech

- (1) Pronouns. Ex.: Mea, Quisque, Utra. Most pronouns have different forms for different genders.
- (2) Verbs, participles excepted, and other parts of speech. Ex.: Extra, Parce. All these names should be considered neuter.

#### D-If generic name is an artificial word

- (1) Artificial combinations of letters. Ex.: Aa, Neda, Nonion, Salifa, Torix.
  - (2) Barbaric unlatinized names. Ex.: Macao, Scalez, Vanikoro.
- (3) Names with mis-spelled endings. Ex.: Batocriusis (for Batocrinon, Graphiadactyllis (for Graphiadactylus).

The genders of these names could be established as masculine or neuter in case of obvious masculine or neuter endings. All others, including the barbaric names, could be considered feminine by analogy with the suggestion in paragraph  $\Pi$ , B, 3.

# III—Specific Names

#### A-If specific name is a substantive

Specific substantives may be either in the nominative singular in apposition to the generic name (*Retepora archimedes*), or in the genitive, as a possessive term (*Rotalia beccarii*).

# B—If specific name is an adjective or participle

The gender of a specific adjective or participle must conform with the gender of the generic name.

Latin compound adjectives whose last parts are substantives, are regularly inflected like adjectives with three endings if they end in -us (or -er), -a, or -um, or as adjectives with two endings if they end in -is or -e (cfr. semicirculus, -a, -um; sexangulus, -a, -um; unicalamus, -a, -um; unimanus, -a, -um; semicanis, -e; etc.).

Names that may be either substantives or adjectives should be considered as adjectives to agree with the adjectival character of the specific name.

# C-If specific name is another part of speech

- 1. Pronouns. Pronouns that have different forms for different genders should follow accordance rules (Spondylospira alia).
- 2. Verbs, participles excluded, and other parts of speech. All these names should be considered invariably as appositions.

## D-If specific name is an artificial word

Artificial names similar to those used for generic names have been employed for species. They should be treated invariably as appositions.

#### **IV**—Limitations

Some possibilities of error and doubt remain:

- (1) Mis-spelled names and failure to recognize barbaric and artificial words as such may lead to wrong identifications in the dictionaries.
- (2) Greek verbal forms other than the infinitive may not be found in the dictionaries (*Dendryazousa*).
- (3) The same word may be found to have different values and meanings. As suggested, names that may be either substantives or adjectives should be considered substantives, if used as generic names, or adjectives, if used as specific names. Other names may be either substantives or adverbs (*Parum*), pronouns or adverbs (*Palum*), verbs or adverbs (*Parce*), etc. No rule can be set for these names, and each must be considered individually. They occur very rarely.

#### By the late JAMES L. PETERS

(Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.)

Extract from a letter, dated 21st May, 1951

RELATIVE STATUS FOR THE PURPOSES OF THE LAW OF HOMONYMY OF SCIENTIFIC NAMES CONSISTING OF COMPOUND WORDS DIFFERING FROM ONE ANOTHER IN SPELLING ONLY BY THE USE OF DIFFERENT CONNECTIVE VOWELS

Another question in my mind is the status as homonyms of such compound names as albofasciatus, albifasciatus, etc. Here Sherborn treats such compounds as different names, and under the Rules they are, even though of the same origin and meaning.

#### By W. D. LANG

(late of British Museum (Natural History), Department of Geology, London)

Letter, dated 12th June, 1951

It is only recently that I have seen your letter in *Nature* (vol. 167: 160) on the Orthography of Names in Zoology, asking for the opinions of zoologists and palaeontologists on the matter.

I have always advocated a very wide interpretation of Article 19, and, if a name derived from Greek or Latin is wrongly formed, have held it not only kinder to the author, but also to be an opportunity of purifying our nomenclature, to attribute the mis-spelling to a printer's error and not to the author's ignorance.

A caveat, however, should be entered. If an author does not state the derivation of a name, it can easily be wrongly assumed that he derived the name from this or that classical word or words, while really he derived it from another source. It follows that, in putting forward a new name, the author should give its derivation (if any) and this should be made compulsory.

I plead guilty freely to have emended generic names derived from classical words (taking my co-authors with me) in our work—W. D. Lang, Stanley Smith, and H. D. Thomas in our *Index of Palaeozoic Coral Genera* (Brit. Mus. (Nat. Hist.)), in which, incidentally, I have described the Code as "imperfectly conceived and inadequately expressed" (p. 8). This was not meant unkindly, but as expressing the struggles and difficulties of interpreting it over a professional lifetime.

#### By J. MARVIN WELLER

(University of Chicago, Department of Geology, Illinois, U.S.A.)

Enclosure to a letter, dated 26th November, 1951

#### VARIATIONS IN SPELLING OF HOMONYMOUS NAMES

The International Rules list certain variations in the spelling of specific names, mostly resulting from variant transliterations from the Greek, which are not sufficient to prevent the formation of homonyms (Art. 35, a to e). Presumably this list is exhaustive and at present any other variations in spelling serve to distinguish different names from each other.

Obviously, similar provisions should apply to generic names.\*

A logical review of this general problem suggests that a broadening of the rule is desirable and the International Commission is requested to consider emending and adding to this list as follows:

- (1) All variations resulting from non-uniform phonetic transliterations of names or words derived from languages normally not written in the Roman alphabet. Examples: *Shantungia* Walcott, 1905, and *Schantungia* Lorenz, 1906, Trilobita (from Chinese), *Jacobsonia* Koschantschikov, 1912, and *Yakobsonia* Kozancikov, 1912, Coleoptera (from Russian).
- (2) Variations resulting from the phonetic representation of certain consonants of some languages whose pronunciation differs from that of French. Example: Kuzmićia Brusina, 1870, and Kuzmichia Norman, 1890, Mollusca.
- (3) The presence or absence of an umlaut, or similar sign, or the equivalent double vowel. Examples: *Törnquistia* Reed, 1896, *Toernquistia* Vogdes, 1925, and *Tornquistia* Kobayashi, 1935, Trilobita.
- (4) The presence or absence of accents or other diacritic marks. Examples: Légeria Labbé, 1899, and Legeria Blanchard, 1900, Protozoa; Ichthyaetus Kaup, 1829 and Ichthyaetus Sweeting, 1837, Aves.

<sup>\*</sup> Ed. Note: Since 1948 these rules have applied to generic names (see 1950, Bull. zool. Nomencl. 4: 161-162).

- (5) The presence or absence of i used as a connective vowel between the parts of compound names or before gender or other suffixes. Examples: Brachonyx Schoenherr, 1825, and Brachionyx Meigen, 1832, Coleoptera and Lepidoptera; Bayleia Munier-Chalmas, 1873, and Baylea Koninck 1883, Mollusca.
- (6) Variations in connective vowels of compound names or elimination or alteration of initial or terminal root vowels for euphonistic purposes. Examples: Aviculopecten M'Coy, 1851, and Aveculipecten Girty, 1904, Mollusca; Heterechinus Quenstedt, 1874, and Heteroechinus Quenstedt, 1874, Echinodermata; Pseudophonus Metschouslky, 1844, Pseudophonus Motschoulsky, 1848, and Pseudaphonus Casey, 1915, Coleoptera; Lahillia Cossmann, 1899, and Lahillea Loriol, 1904, Mollusca and Echinodermata.

In the interest of clarity and to eliminate the possibility of confusion, other slight variations of spelling within restricted zoologic groups are undesirable. No rules can be framed to meet this situation, however, because the International Rules are not concerned with taxonomic matters and disagreement is likely to occur concerning degrees of supposed relationship. Nevertheless, the International Commission should indicate its interest in problems of this type and its willingness to consider petitions for the exercise of its plenary powers in the suppression of junior or less used names if confusion is indicated.

- (a) Most troublesome are names differing only in gender ending. Example: Strotocephalus Resser, 1935, and Strotocephala Raymond, 1937, Trilobita.
- (b) Some names differing in gender endings also differ slightly in other ways. Examples: Pterocephalia Roemer, 1852, and Pterocephalus Raw, 1908, Trilobita; Ellipsocephalus Emmrich, 1839, (common spelling of Elleipsocephalus Zenker, 1838), and Elliptocephala Emmons, 1844, Trilobita.
- (c) Other names that might be confused differ slightly in a great variety of ways. Examples: Chuangia Walcott, 1911, and Changia Sun, 1923, Trilobita; Shangtungia Walcott, 1905, and Schantungia Lorenz, 1906, Trilobita.

#### By G. H. E. HOPKINS, O.B.E., M.A.

(British Museum (Natural History), Zoological Museum, Tring, Herts.)

Statement received on 14th March, 1952

# ON THE REFORM OF ARTICLE 19 OF THE "RÈGLES" RELATING TO THE CONDITIONS IN WHICH EMENDATIONS OF SCIENTIFIC NAMES SHOULD BE MADE OR ACCEPTED

In para. 17 of the request for advice on the subject of emendation of zoological names (Bull. zool. Nomencl. 7: 4-49), proposals are made for the definition of "emendation" and "erroneous spelling change", and the suggestion is made that there is not likely to be any difficulty in finding an author who, in making an emendation, definitely states that the original spelling was wrong. In my opinion the definition of "emendation" is too rigid, unless a third category is added to the two categories of spelling-alterations which it is proposed to define, and it is not a matter of opinion but of subjective fact that the suggestion that it will not be difficult to find some author who makes the statement that the original spelling was wrong is too optimistic. I am able to produce a definite instance that illustrates these points.

Kellogg and Chapman (1902, J. N. Y. ent. Soc. 10) describe a species of Mallophaga whose name is spelt on p. 21 as Nirmus luprepes and on p. 28 as Nirmus luprepea. Kellogg never gave names consisting of arbitrary arrangements of letters, and this name ought quite obviously to be euprepes (from  $\epsilon \tilde{v}\pi\rho\epsilon\pi\eta_{S}$ , well-looking, or comely) for luprepes is meaningless either in Latin or in Greek. Moreover, Kellogg himself (1908, Wytsman's Genera Insectorum fascicle 66, Mallophaga: 24 and 79) corrected the spelling to euprepes but without making any statement that the original spelling was wrong. Apart from the fact that two new spelling-mistakes were made by Kellogg and Chapman in 1912 (Ent. News 23: 13, where the name is misspelt Normis eaprepes), and that one author on one occasion reverted to luprepes (as the earliest spelling), all subsequent authors have spelt the trivial component of the specific name as euprepes until Hopkins (1942, Ann. Mag. nat. Hist. (11) 9: 113, 114) pointed out that Nirmus cuprepes Kellogg and Chapman 1902 is a subjective synonym of Quadraceps strepsilaris (Denny) 1842, but no author (to the best of my knowledge) has ever published a definite statement that the spelling "luprepes" was wrong. The fact that euprepes is a synonym does not affect the argument, and in this instance the fact that no author has ever made it clear that he was making the spelling-change intentionally would mean, under the proposed definitions, that we would have to reject Kellogg's almost universally accepted and obviously correct emendation of 1908 as either "an error" or "an erroneous spelling change" and revert to the misprint "luprepes".

To a considerable extent the difficulty is met by the "saving clause" suggested in para. 21 of the request for advice, but the objection to calling a correction an "erroneous spelling change" in cases where the change is clearly correct remains unaffected. I suggest that the addition of a category which might be called an "apparent correction", a "non-explicit emendation" or a "potentially valid alteration" for those instances in which there is reason to believe that the alteration may have been deliberate although this is not actually stated would do less violence to the facts, be less objectionable, and be less liable to be read as prejudging the case, than to attempt to force such instances into the Procrustean alternatives of "emendation" or "erroneous spelling change". I, for one, could never bring myself to stigmatise as either "an error" or "an erroneous spelling change" Kellogg's obviously correct emendation of "luprepes" to "euprepes" without at least explaining that a too-rigid definition forced me to use a misleading and incorrect term merely because Kellogg did not actually state that the correction was deliberate.

Moreover, the proposed "saving clause" does not meet the requirements of another class of error in which the emendation has not yet been published. Again, I am able to illustrate this by a definite example. In 1930, Zool. Anz. 92: 201) named a flea Xenopsylla nuttali, stating (l.c.: 204) that it was named in honour of Professor G. D. H. "Nuttal", the well-known English parasitologist. None of the few writers who have had occasion to refer to the species since its description have been English-speaking, and evidently none of them were aware that the Professor's name was Nuttall, for no correction has been published, so the incorrect spelling "nuttali" is the one in current use and the "saving clause" does not authorise its automatic correction to nuttalli. Nor does any other paragraph of the suggestions appear to cover this type of instance. Para. 39 deals only with automatic emendation of names incorrectly transliterated from some alphabet other than Latin, and para. 40 with spelling mistakes in names of personages of Roman antiquity, while para. 43 deals (so far as names derived from those of persons are concerned) only with errors in reading or copying the name of the captor of a specimen. Xenopsylla "nuttali" falls into none of these classes, yet to many parasitologists the perpetuation of this mis-spelling of the name of our late eminent colleague is far more objectionable than the perpetuation of "Vennus" for Venus or "Cesar" for Caesar (see para. 40 of the request for advice), since those latter personages, eminent though they were, are not our own living or recently deceased fellow-workers in zoology. The difficulty could be met by substituting in para. 45 for the words "captor of a specimen" the phrase "person upon who name the name of the taxonomic unit is based " (a change that in any case is desirable) but for the fact that this paragraph does not provide for

automatic correction of the mistake, as is obviously desirable where the correction is based on an objective fact like the spelling of a name normally written in the Latin alphabet. There seems to be no reason, however, why the names of modern persons (if normally written in the Latin alphabet) should be excluded from the provision for automatic correction made in para. 40, and in my opinion this should be done. It may be asserted that it is so obvious that an error of this kind contravenes Article 14 that it is unnecessary to state that the error should automatically be corrected, but arguments with other systematists have convinced us that it is unsafe to leave even the most obvious deduction to the commonsense of the reader, and that every detail (so far as possible) should be explicitly dealt with in the  $R\`egles$ .

By C. W. WRIGHT (London)

Enclosure to a letter dated 19th March, 1952

#### THE EMENDATION OF ZOOLOGICAL NAMES (Z.N.(S.)356)

In accordance with the request in the Bulletin of Zoological Nomenclature, 7, Parts 1 and 2, 25th February, 1952, I give my views on the conclusions and recommendations relating to the above subject.

- 2. I write as a palaezoologist trained and interested in the classical languages. Despite this background I strongly endorse the objects and methods of the proposals. In particular I agree to the need to restrict the scope of automatic emendation. In the past many emendations have been made by authors quite unqualified to do so even on the basis of the principles which they supposed that they were employing. This source of confusion will be reduced as the scope of automatic emendation is reduced.
- 3. As in other fields however, the provisions for emendation by the International Commission will only be generally acceptable to the extent that applications and, more important, decisions appear rapidly in the *Bulletin* and to the extent that the *Bulletin* is read by an adequate number of zoologists.
- 4. With regard to the suggested provisions to be inserted in the Règles concurrently with the Law of Emendation, I support the suggested solution to the problem of two or more spellings of a name employed in the original publication. I also agree that it is necessary to insert an Article prescribing the procedure to be followed in forming adjectival names based upon place names. A case that should be taken into consideration when this Article is drafted is that of the abbreviation of the original name: for example Brydone (1929: passim) in several instances employed trivial names of the form "trimensis" based on place names such as Trimingham.
- 5. Reference was made in para. 54 to the decision of the International Congress in 1948 that personal names employed in a Latinised genitive as trivial names should where published originally with the termination "i" be automatically emended to end in "i". I suggest that when the appropriate Article comes to be rewritten specific reference should be made to the necessity for preserving and not "emending" adjectival trivial names formed from personal names and ending in "anus"\*. In the past and especially in the mid-nineteenth century these trivial names have in many cases been "emended" to end in "i".

#### Reference

Brydone, R. M., 1929. "Further notes on new or imperfectly known Polyzoa," London.

<sup>\*</sup> In this connection see Document 14/1 (: 221).

#### By RUDOLF RICHTER

(Forschungs-Institut, Senckenberg, Frankfurt a. M., Germany)

Statement received on 28th March, 1952

(Editorial Note: The following paper by Professor Richter had, prior to its submission to the International Commission, been published (in February 1952) in the serial publication Senckenbergiana (32(5/6): 357-366) and the copy submitted was an offprint from that serial. A large part of this paper was concerned with the use in zoological names of diacritic marks, and many examples in various types of fount were given by Professor Richter. On inspection of this paper it was considered that, in view of the importance to Professor Richter's argument of the correct reproduction of the numerous diacritic marks which he cited and of the difficulty (as he pointed out) in printing these signs, the best course would be to reproduce his paper by facsimile rather than to reprint it. This course has accordingly been followed.)

#### English Translation of the Summary of Conclusions given by Professor Richter on the last page of his paper

The revised text of the *Règles* should announce unmistakably the principle: "Quo modo impressum est, nomen maneat." A zoological name may not be privately emended. Even "la recherche du parrain [geneological research] est interdite", if it leads to the changing of zoological names.

Diacritic marks are nomenclatorially non-significant and create only optional variations of the same name. The limitation of printing technique leaves no alternative.

The difference between "Umlaut" and "Laut" is nomenclatorially significant ("ue" is nomenclatorially distinct from "u", but "ue" is nomenclatorially identical with "ü"). Since in German the "Umlaut" can always be expressed in the Latin alphabet (as "ue") as well as by the use of diacritic marks ("ü"), the classical form should be permitted in reproducing names originally published with an "Umlaut" and should be compulsory for all new names to be published in future. Here, too, limitations of printing technique allow no choice.

The emendation of a zoological name is nomenclatorially valid only in those important individual cases where the Commission has exercised its plenary powers to "Suspend the Rules".

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Frankfurt am Main, 20, 2, 1952

Antworten und Fragen zur Zoologischen Nomenklatur. 1.

# Schutz der Tier-Namen vor Emendation.

(Veränderung der Schreibweise infolge von Diakritischen Zeichen, Umlaut und Transkription.)

#### RUDOLF RICHTER. Forschungs-Institut Senckenberg.

#### Inhale.

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#### Vorwort.

Wie sich der Chirurg der Sorge um sein Werkzeug nicht entziehen darf, so gibt es Wie sich der Chirurg der Sorge um sein Werkzeug nicht entziehen dari, so gibt es für den Zoologen, den neontologischen wie den paläontologischen, in der Nomenklatur kein "minima non curat praetor". Überläßt er eine Winzigkeit dem Nomenklaturisten, so bleibt die Nomenklatur in Unruhe, und die Beschäftigung mit ihr wird als Selbstzweck verewigt.

Die Nomenklatur hat jedem Namen eine Form zu geben, die in allen Sprachen und zu allen Zeiten un veränder Namen eine Form zu geben, die in allen Sprachen und zu allen Zeiten un veränder Namen an eine Urkunde bindet und seine Legitimität von der kenntlichen Varöffentlichung dieser Urkunde abhängig macht.

von der kenntlichen Veröffentlichung dieser Urkunde abhängig macht.

Die Internationalen Kongresse haben zu diesem Zweck die "Internationalen Regeln der Zoologischen Nomenklatur" (IRZN) geschaffen und die "Ständige Kommission" eingesetzt, die durch ihre "Gutachten" (opinions) die Entwicklung der Nomenklatur weiterführen soll. Diese Entwicklung zur Stabilität hat sich anfangs zögernd und erst nach der Einführung der "Suspension" etwas rascher vollzogen. Von der Beschäftigung mit einzelnen, oft nur für Spezialisten wichtigen Namen beginnt sich die Kommission erst neuerdings dem durch greifen den Schutz aller gebräuchlichen Namen zuzuwenden.

Die Entwicklung ist auf dem Marsch. Ihr gelten auch diese "Antworten". Es werden häufig Fragen an uns gerichtet. Und wenn dann die Antwort nicht durch einen Hinweis auf die IRZN oder auf die betreffende Stelle in unsrer "Einführung" (1948, 2. Aufl.) gegeben werden kann, sondern von grundsätzlichem Interesse ist, so soll sie hier gegeben werden. Gelegentlich möchten aber auch wir "Fragen" aufwerfen, die wir im Sinne der Entwicklung zur Stabilität geklärt sehen möchten. Der Internationale Zoologen-Kongreß soll ja 1953 in Kopenhagen über eine neue Fass ung der IRZN Beschluß fassen, mit deren Entwurf er die Kommission beauftragt hat. Da dabei auch an die inhaltliche Anderung einiger Bestimmungen gedacht wird, muß die Offentlichkeit rechtzeitig zur Mitwirkung herangezogen werden.

### A. Stabilisierung durch den Satz "Quo modo impressum est, nomen maneat".

Es handelt sich hier nicht um die Frage nach der sprachlichen "Richtigkeit" des Namens. Es handelt sich um die Sicherheit der Nomenklatur.

In ihren Anfängen stand die Nomenklatur unter der Furcht vor einer, von der Schule her, als engherzig verkannten Philologie. Gerade die wissenschaftliche Philologie aber hat, über manche vermeintliche Schwierigkeit hinweg, bei der Stabilisierung der Namen geholfen, indem sie schöpferische Möglichkeiten zeigte, die schon in den Entwicklungs-Gesetzen der alten Sprachen liegen. Die Kommission, in der wachsenden Erkenntnis ihrer stabilisierenden Aufgabe, hat das dankbar begrüßt.

Sorgfältige Rücksicht auch auf die sprachliche Richtigkeit soll bei der Aufstellung eines Namens ernste Pflicht sein, nicht nur für jeden überzeugten Humanisten.

Aber es ist der oberste Grundsatz der Nomenklatur: Unzoologische Erwägungen dürfen die Stabilität der Nomenklatur nicht gefährden. Auch aus philologischen und historischen Erwägungen darf ein veröffentlichter Name nicht geändert werden.

Seitdem die Kommission einmal zur Beurteilung eines Tier-Namens Sachverständige des kretischen, megarischen und syrakusanischen Dialekts des Griechischen heranziehen sollte (R. R. 1948: 123), hat man eingesehen, daß solche Erörterungen selten zu einer einheitlichen Entscheidung führen und daß die zoologische Wissenschaft andere Aufgaben hat. Das Werkzeug. Nomenklatur soll scharf bleiben; das ist alles.

Quo modo impressum est, nomen maneat. Die Erkenntnis dieser Notwendigkeit verhindert, daß durch Nomenklaturisten Sand in die empfindliche Maschine der Nomenklatur gestreut wird. Zum Schutz der Namen gegen unzoologische Änderungen liegen in den "Regeln" und "Gutachten" Stabilisatoren für den Einsichtigen bereit. Als ultima ratio hat die Kommission den Artikel 24k der IRZN selber herangezogen und damit zum Gebrauch empfohlen: Als "willkürliche Vereinigung von Buchstaben" kann schließlich fast jeder Name vor Besserwisserei geschützt werden. (Dieser Schutz wird lückenlos sobald in Artikel 34 u. 35 die 5 Worte "von derselben Ableitung und Bedeutung" gestrichen werden: vgl. F.)

Überlegungen und Anträge, wie sie soeben (1951a, b) von H. M. MUIR-WOOD veröffentlicht werden, sind zur Klärung solcher Fragen willkommen. Es scheint uns allerdings, als ob diese Anträge bereits von den IRZN entschieden sind, sobald man diese, ihrem Geiste entsprechend, von einigen Widersprüchen befreit. Es sind nur wenige Worte der IRZN, die hier stören. Aber diese Worte ragen wie fremde Klippen aus einem längst fossil gewordenen Untergrund in die Regeln hinein und verlangen Bereinigung des Fahrwassers.

## B. Diakritische Zeichen oder Klassisches Latein-Alphabet?

Das "Klassische Latein-Alphabet" ist das Alphabet der lateinischen Sprache. Es ist in allen Druckereien, welche wissenschaftliche Bücher drucken, vorhanden. Das "Erweiterte Latein-Alphabet" ist dasjenige, welches zu den einfachen Buchstaben der Römer Diakritische Zeichen hinzugefügt hat. Die Lettern mit Diakritischen Zeichen sind nur in wenigen großen Druckereien vollständig vorhanden, und in manchen Ländern überhaupt nicht vollständig. Das gilt oft schon für die gewöhnlicheren unter den "Diakritischen" Lettern wie å, à, ê, ĕ, è, é, é, ë, ï, ç, č, ř, š, ž. Selten aber finden sich vollständig die Lettern der skandinavischen Sprachen (å, ø), der spanischen (á, í, ó, ñ), der portugiesischen (ã, õ usw.), der rumänischen (å, ş usw.) oder anderer Sprachen (ć, ę, ğ, ì, î, ò, ś, ú, ù, û, ź). Manche, wie das polnische l (durchstrichen), stehen auch uns selber nicht zur

Verfügung.

Überdies genügen für die Zwecke der Zoologischen Nomenklatur nicht nur die Lettern des normalen Satzes zur Vollständigkeit. Die Zoologie benötigt vielmehr stets mehrere Satz-Arten nebeneinander. (Wir nehmen bei den folgenden Beispielen, um auch die von der deutschen Sprache verursachten Schwierigkeiten nicht auszuschließen, die Letter ü hinzu, obwohl sie nach D nicht hierhin gehört.) Benötigt werden neben den stehenden Lettern im allgemeinen Text (Müllendorf, Černyševsk) vor allem auch die kursiven für die Namen der Gattungen und Arten ("italics": mülleri, černyševi) und ferner noch die Majuskeln für die Namen der Autoren ("Kapitälchen": MÜLLER, ČERNYŠEV). Denn die zoologische Literatur verliert an Lesbarkeit, wenn Zeitschriften oder Bücher die moderne Höhe einer differenzierten Typographie nicht einhalten und die Rücksicht auf den Leser vernachlässigen. Daher muß jede dieser drei Satz-Arten auch noch in verschiedener Dicke und Größe vorhanden sein: in Fett (mülleri, černyševi) und in Mager (mülleri, černyševi), in normaler Größe, in Überschrifts-Größe und in Kleindruck ("Petit": mülleri, černyševi).

Für das Klassische Latein-Alphabet können und müssen diese verschiedenen Satz-Arten gefordert werden. Für die Diakritischen Lettern hat sich aber die

geforderte Vollständigkeit als unmöglich erwiesen.

Die Forderung der Diakritischen Zeichen ist aber tatsächlich in dem bisherigen Wortlaut der IRZN enthalten, nämlich in Artikel 20. Hier (und das ist die einzige Erwähnung der Zeichen) wird vorgeschrieben: "Pour la formation de noms empruntés aux langues s'écrivant avec l'alphabet latin, on conserve l'orthographe originale, y compris les signes diacritiques." Durch seine Beispiele schreibt der Artikel 20 ausdrücklich folgende (kursive) Lettern vor: å, ø,  $\tilde{n}$ ,  $\acute{c}$ ,  $\check{z}$ ,  $\ddot{a}$ ,  $\ddot{o}$ ,  $\ddot{u}$ .

Ultra posse nemo obligatur. Auch die gewissenhafteste Absicht des Autors findet ihre Grenze an der technischen Leistungsfähigkeit der Druckerei. Und diese ist von Land zu Land, von Ort zu Ort verschieden. Die tägliche Praxis lehrt, daß die Diakritischen Zeichen nur sehr unvollständig und in wild wechselnder Weise "conserviert" werden können, wie es Artikel 20 wünscht. Die Folge: Tier-Namen, denen der Autor bei der Aufstellung ein Diakritisches Zeichen gegeben hat, müssen in den verschiedenen Zeitschriften notgedrungen in verschiedener Form erscheinen. Der Artikel 20 kann das nicht verhindern; er ist eher selber die Ursache für die entstehende Buntscheckigkeit.

Die Druckweise bald mit, bald ohne Zeichen, bald mit einem Teil, liefert also Varianten, die via facti erzwungen werden. Diese können für die Nomenklatur keine größere Bedeutung haben als die ausdrücklich erlaubten "f a k u l t a t i v e n V a r i a n t e n". Es ist demnach selbstverständlich, daß der Besitz oder das Fehlen eines Diakritischen Zeichens (nicht aber der wirksame Unterschied zwischen u und ue: vgl. C) eine "nomenklatorisch unwirksame Verschiedenheit" im Sinne der Artikel 34 u. 35 ist (vgl. R. R. 1948: 189-195). Das heißt: Diakritische Zeichen ändern nichts an der Homonymie von sonst gleichen Namen. Černyševia und Cernysevia, joaquini und joaquini sind homonym.

Über die Frage, ob Diakritische Zeichen nachträglich zu einem Namen hinzugefügt oder geändert werden dürfen oder sogar müssen, vgl. auch in E.

Es könnte viel Geld gespart werden, nämlich in allen Ländern mit der alleinigen Ausnahme der Heimat des jeweiligen Autors, und die Tier-Namen würden weniger buntscheckig aussehen, wenn die neuen IRZN sich zu dem Satz entschließen könnten:

"Namen, die in Zukunft aufgestellt werden, sind mit den Buchstaben des Klassischen Latein-Alphabets zu schreiben, also ohne Diakritische Zeichen."

Gegen einen solchen radikalen Satz ist aber in manchen Ländern Widerspruch vorauszusehen: Denn č und c usw. bezeichnen verschiedene Laute, und ihr Unterschied kann die völlige Verschiedenheit zweier persönlicher oder geographischer Namen bedeuten. Es ist also verständlich, wenn die betroffenen Sprachen auch bei den Tier-Namen an den für sie unentbehrlichen Zeichen festhalten wollen. Sie müssen dann eben das Wegbleiben der Zeichen in solchen Ländern in Kauf nehmen, welche bei allem Streben nach Akribie die Zeichen nicht drucken können.

Alle Völker werden aber voraussichtlich ihre Zustimmung geben, wenn die IRZN bei einer Neufassung des Textes (vgl. R. R. 1948: 130) deutlich aussprechen:

"Diakritische Zeichen verursachen nur nomenklatorisch unwirksame Varianten des Namens: Ein Name, der mit solchen Zeichen veröffentlicht worden ist, darf auch ohne sie übernommen werden. Ein Name, der ohne solche Zeichen veröffentlicht worden ist, darf nicht nachträglich damit versehen werden."

#### C. Umlaute dürfen von der Nomenklatur nicht mit Diakritischen Zeichen verwechselt werden.

Die deutsche Sprache, welche die Nomenklatur mit unersetzbaren Zeichen verschont hat, bereitet ihr dafür dauernde Schwierigkeiten durch die Umlaute. Immer wieder, und so auch neuerdings, sind in den fremden Literaturen nomenklatorische Verwirrungen entstanden, weil man sich über die Behandlung "of the umlaut" nicht im Klaren war.

Ein Umlaut ist ein selbständiger Vokal<sup>1</sup>). Weil er geschichtlich aus einem älteren Vokal durch Anderung der Aussprache hervorgegangen ist (ae aus a, oe aus o, ue aus u), wird er optisch durch den älteren Vokal mit Hinzufügung des Vokals e wiedergegeben. Dieses e kann hinter das a, o, u gesetzt wer-

<sup>1)</sup> Der Umlaut ist also ein akustischer Laut; er ist nicht das optische Zeichen für den Laut (also nicht "an umlaut over the o").

den (ae, oe, ue) oder auch über das a, o, u. Dann sieht das e wie zwei Punkte aus: ä, ö, ü. (Auch das Schwedische hat ä, und ö.) Beide Schreibweisen sind gleichwertig und vikariieren in der deutschen Sprache beliebig, ohne die

Aussprache zu ändern.

Nur im juristischen Gebrauch ist es in neuerer Zeit bei den Namen von Personen und Orten festgelegt worden, ob sie klassisch oder "diakritisch" geschrieben werden sollen. Aber im täglichen Gebrauch oder aus technischer Notwendigkeit werden alle Wörter und auch alle Namen auf beide Weisen geschrieben: Müller ist gleich Mueller und Rüdersdorf ist gleich Ruedersdorf. Dabei ersteht kein neuer Laut und kein neuer Name.

Hierin liegt der Unterschied gegen jene Laute, die in ihrer Sprache nur durch Diakritische Zeichen wiedergegeben werden können. Es ist der Vorzug der Umlaute, daß sie bereits in ihrer Sprache (im Deutschen) auf Diakritische Zeichen nicht angewiesen sind, sondern sich ebenso genau auch durch das Klastische

sische Latein-Alphabet wiedergeben lassen.

Dagegen ist MULLER ein ganz anderes Wort und ein anderer Name als MÜLLER, und Rüdersdorf (bei Berlin) ist ein anderer Ort als

Rudersdorf (in Westfalen).

Daher ist es ein irreführender Fehler, wenn ausländische Druckereien, welche die Letter ü nicht besitzen, aus Müller einen Muller und aus Rüdersdorf ein Rudersdorf machen, während sie doch ohne Mühe richtig drucken könnten: Mueller und Ruedersdorf. Dagegen sind die Schreibweisen muelleri und mülleri nur fakultative Varianten desselben Namens, die aus Gründen der Technik mit einander vikarieren.

Leider entstehen immer wieder neue Irrtümer durch Ausländer, die nicht wissen, daß man ü im Notfall stets durch ue, aber niemals durch u wiedergeben darf.

Sehr einfach klärt sich so auch die Frage, die von H. M. Muir-Woon (1951b) mit ausführlichen Erörterungen der Kommission vorgelegt worden ist, nämlich ob Tornquistia PAECKELMANN 1930 ein Homonym von Törnquistia REED 1896 ist. Diese beiden Namen sind natürlich keine Homonym e. Nicht etwa deshalb, weil der Pate des Trilobiten von 1896 der Schwede Törnquist ist und der Pate des Brachiopoden von 1930 der Deutsche Tornquist. (Die Frage nach dem Paten darf die Nomenklatur niemals verwirren: vgl. E). Sondern deshalb, weil o und ö völlig verschieden e Vokale sind. Tornquistia und Törnquistia bestehen legitim als völlig selbständige Namen nebeneinander, — nicht anders, als etwa Tarnquistia und Turnquistia nebeneinander bestehen würden.

Dagegen wäre Törnquistia, da man diesen Namen, notwendig oder beliebig, ja stets auch Toernquistia schreiben darf, natürlich ein Homonym von Toernquistia. Beide Namen wären nur fakultative Varianten.

Auch das norwegische ø wird in schwedischen Büchern oft durch ö wiedergegeben, und dieses würde sich in Ländern, die kein ö besitzen, notwendig weiter in oe verwandeln; kaum zum Schaden der Nomenklatur. Es muß den Schweden überlassen bleiben, wie sie das å durch das Klassische Latein-Alphabet wiedergegeben zu sehen wünschen, wenn eine Druckerei die "Diakritische" Letter nicht besitzt.

Für die deutschen Umlaute ist die nomenklatorische Behandlung also klar. "Mit guter Logik empfehlen die IRZN in ihrer jetzigen Fassung in Artikel 20: "Werden neue Namen vorgeschlagen, die sich auf Personen-Namen beziehen, die manchmal mit ä, ö, oder ü geschrieben werden, so möge der Autor die Schreibweise ae, oe und ue annehmen. — Beispiel: muelleri habe den Vorzug vor mülleri."

Nur genügt diese Empfehlung nicht. Denn sie müßte sich auf sämtliche Tier-Namen beziehen und nicht nur auf solche, die von Personen-Namen abgeleitet werden. Außerdem müßten die IRZN eine Empfehlung (in ihrem Anhang G) aufheben, durch die sie sich selber unnötige und nicht beabsichtigte Schwierigkeiten machen. Denn in Anhang G empfehlen die IRZN, daß bei Tier-Namen, die von geographischen Namen nicht-lateinisch schreibender Sprachen abgeleitet sind, der französische u-Laut (also der deutsche Umlaut  $\ddot{u} = ue$ ) durch das sonst verpönte deutsche "diakritische"  $\ddot{u}$  wiedergegeben werden soll. Diese Empfehlung ist nur durch ein Versehen in die IRZN hineingeraten, indem die Transkriptions-Regeln einer Geographischen Gesellschaft im Block und ohne Beachtung der Folgen für die Nomenklatur übernommen worden sind.

Der neue Text der IRZN sollte mit der unabänderlichen Not der Druckereien vieler Länder rechnen und aus dieser Not eine Tugend machen. Den Konfusionen der Nomenklatur (mülleri fälschlich mit mulleri und Tornquistia fälschlich mit Törnquistia identifiziert!) sollte vorgebeugt werden. Dazu genügt die Aufnahme folgender Sätze in Artikel 24:

"Alle Namen, die mit  $\ddot{a}$ ,  $\ddot{o}$ , und  $\ddot{u}$  veröffentlicht worden sind, dürfen auch mit ae, oe und ue übernommen werden. Beide Schreibweisen sind fakultative, also nomenklatorisch unwirksame Varianten. Dagegen ist der Unterschied zwischen a und  $\ddot{a}$  (=ae), o und  $\ddot{o}$  (=oe), u und  $\ddot{u}$  (=ue) nomenklatorisch wirksam und verhindert die Homonymie sonst gleicher Namen."

## D. Schutz vor Einflüssen der Transkription.

Vorschriften dürfen niemals mit rückwirkender Kraft eingeführt werden, wenn die Tier-Namen vor Veränderung geschützt bleiben sollen. Eine lex post factum ist immer illegal.

Daher würden auch obligatorische Transkriptions-Vorschriften unheilvolle Verwirrungen hervorrufen, wenn sie rückwirkend eingeführt werden sollten. Denn dadurch würden bestehende Namen noch nachträglich mit "Fehlern der Transkription" belastet und so gefährdet werden. Auch dürften nur solche Diakritische Zeichen vorgeschrieben werden, die in der Praxis wirklich überall beschafft werden können. Mit diesen Vorbehalten kann der Antrag nützlich sein, den H. M. Muir-Wood (1951a) an die Kommission richtet: die IRZN möchten neben der Transkription der griechischen auch die der kyrillischen Buchstaben ins Auge fassen. Wie immer, wenn es sich um die Form des Tier-Namens handelt, sind aber wohl auch hier fakultative Ratschläge zweckmäßiger als bindende Vorschriften.

Die Streitigkeiten über die "richtige" Transkription eines Tier-Namens haben der Nomenklatur nur Zeitverlust ohne Ende gebracht. Die Schuld trägt ein einziger, unglücklicher Nebensatz in Artikel 19. Dieser Nebensatz ist die eine jener beiden Klippen, die aus der Vorzeit in das Fahrwasser der modernen Nomenklatur schiffbrechend aufragen (vgl. A). Der Artikel 19 lautet: "L'orthographe originelle d'un nom doit être conservée, à moins qu'il ne soit évident que ce nom renferme une faute de transcription, d'orthographe ou d'impression."

Die Nomenklaturisten haben sich diese Handhabe "å moins que" zur Beunruhigung der Nomenklatur nicht entgehen lassen. Ein Beispiel für viele: Sie haben den Namen Acaste Goldfuss 1843 nach dem "Anhang F" der IRZN in Acasta geändert und ihn in dieser Form zu einem "nachträglichen Homonym" von Acasta Leach 1811 machen wollen, mit dem Zweck, einen neuen Substitutions-Namen einzuführen (vgl. R. R. 1948: 124). Nicht immer sind solche Versuche, bevor sie weiteren Schaden anrichten konnten, als unwirksam aus der Welt geschafft worden. Die Nomenklaturisten wollen gern übersehen, daß die IRZN für die Transkription nur fakultative Empfehlungen geben.

Die Kommission hat von Fall zu Fall Abhilfe geschaffen. Sie hat manchen angeblich "falsch" transkribierten Namen geschützt, indem sie ihn als den möglichen Namen eines unbekannten Schiffes (nach Artikel 18i), als eine "willkürliche Vereinigung von Buchstaben" (nach 18k) oder als ein willkürlich umgestelltes Wort (nach 18l) gelten ließ. Aber das hilft dann nicht, wenn der Autor die Etymologie selber angegeben hat. Dann beginnen die immer wieder "besser" emendierten Emendationen, die vielleicht bei Agchylostoma mit 23 verschiedenen Emendationen noch nicht einmal den Gipfel erreicht haben.

Da eine E-mendation (die sprachliche "Ent-Fehlerung" der Form des Namens) selber der Möglichkeit fortgesetzter Emendationen unterliegt und somit zu keinem endgültig stabilen Namen führen kann, widerspricht die Erlaubnis zum Emendieren dem Zweck der Nommenklatur.

Etwas anderes als die Emendation (sprachliche Änderung) ist die Commutatio sensus, die Sinn-Änderung eines Namens, indem man den Namen weiter oder enger gebraucht, als es der ursprüngliche Autor oder irgendein Vorgänger getan hat. Es handelt sich also, da der Typus ja bleibt, um eine Änderung der Diagnose, Solche Sinn-Änderungen müssen jedoch beim Gebrauch so oft erfolgen, daß es kaum nützlich ist, sie im Namen auszudrücken. Will man das aber tun, so sollte man nicht "emend." verwenden und diesem Terminus eine doppelte Bedeutung geben, auch wenn es in Zukunft eine Emendation nicht mehr geben wird. Als selbstverständlich empfiehlt sich: "sensu commutato", bzw. (wenn die Änderung bereits früher, etwa von Anton, vorgenommen worden ist): "sensu Anton, 1890". (Vgl. R. R. 1948: 100, 124, 134.)

Gegen die Versuchung zur Emendation hilft nur der Satz: "Quo modo impressum est, nomen maneat."

Wirkliche Fehler, die dem Autor contra intentionem unterlaufen sind, also die Schreibfehler (lapsus calami) und die Druckfehler (lapsus pressae) des Artikels 19, lassen sich gerade bei gewissenhaften Arbeiten meistens durch die "Auswahl des Richtigen" beseitigen (R. R. 1948: 119). Ist die beabsichtigte Form in der ursprünglichen Veröffentlichung aber überhaupt nicht vorhanden, so ist es das kleinere Übel, den Fehler unverbessert zu über-

n e h m e n. Das hat sich bei bekannten Pflanzen-Namen (Diclythra) bewährt und auch bei manchen Tier-Namen, die man den Nomenklaturisten lieber verschweigt.

Handelt es sich aber um eine "falsche" Schreibweise secundum intentionem, also um "absichtliche orthographische oder grammatische Fehler", so gehören sie zum souveränen Recht des Autors und sind vor jeder "Verbesserung" geschützt. Die Botanischen Regeln verbieten die "Verbesserung" solcher Fehler ausdrücklich. Auch in den IRZN sollte das Verbot klarzum Ausdruck kommen. (R. R. 1950: 269).

#### F. Schutz vor Einflüssen der Schreibweise des Paten-Namens.

Eine dedicatio soll nach LINNAEUS'S Mahnung als "summus honos" geachtet werden. Dann kann die Nachforschung nach dem Paten zeitgeschichtliches Interesse haben. Aber die Nomenklatur darf sich durch solche Nachforschungen nie zu Änderungsversuchen am Tier-Namen verführen lassen. Sie sind unwirksam, und man tut dem Paten keine Ehre an, wenn man seinen Namen zu einer Ursache von Störungen machen möchte.

Die nachträgliche Zufügung von Zeichen ist unter den immer schädlichen Emendationen die harmloseste. Denn sie ändert (nach den Darlegungen in B) am Tier-Namen nichts, was nomenklatorisch wesentlich wäre. Aber das Verbot auch solcher Änderungen würde lange Erörterungen unnötig machen, wie sie gerade jetzt zwischen großen Organisationen im Gange sind.

Vor solchen nicht-nomenklatorischen Erörterungen sollte die Nomenklatur bewahrt bleiben. Der Autor hat manchmal die Zeichen des Paten-Namens bei der Aufstellung des Tier-Namens absichtlich weggelassen, weil er die technischen Schwierigkeiten voraussah und dem Namen eine internationale Einheitlichkeit sichern wollte. Der Autor darf erwarten, daß seine intentio respektiert wird.

Beispiel: Wir stellen in Senckenbergiana, 33, 1952, zu Ehren von Sr. D. Joaquín Gómez de Llarena eine Art joaquini auf und schreiben absichtlich ein i ohne Zeichen vor, weil diese Letter (i) ja doch nicht überall gedruckt werden kann.

Die nachträgliche Änderung der Orthographie eines Tier-Namens aus Rücksicht auf den Paten-Namen ist bedenklicher. Die Folgen können Homonymie und Neu-Benennung sein. Daher muß auch die kleinste private Änderung grundsätzlich unmöglich sein.

Beispiel: Nachdem H. v. MEYER, übrigens aus philologischer Akribie, den Art-Namen senkenbergii aufgestellt hat, obwohl sein Freund SENCKENBERG, der Pate, sich unorthographisch mit ck schrieb, muß es bei der intentio autoris bleiben. (Vgl. R. R. 1950: 269.)

Dadurch entscheidet sich auch der gegenwärtige Streit über die Frage, ob man den veröffentlichten Namen Stalia nachträglich in Stålia ändern dürfe, je nachdem sich, aus dem Wortlaut des Textes oder aus Konjekturen, als Pate ein STAL oder ein STAL herausstelle. (Näheres: R. R. 1948: 130.)

Unterliegt ein Paten-Name verschiedener Transkription, so können die Unterschiede der abgeleiteten Tier-Namen groß werden. Jakowleffia Puton 1875 und Yakovlevia Fredericks 1925 leiten sich von demselben Paten ab. Sicherlich haben Muir-Wood & Cooper (1951: 196) Recht, wenn sie die Homonymie dieser beiden Gattungs-Namen bestreiten und die Neu-Benennung der jüngeren Gattung nicht anerkennen. Es ist dankenswert, daß H. M. Muir-Wood (1951a) die Frage in einem Antrag an die Kommission allgemein aufwirft. Die Antwort scheint uns klar zu sein. Wären solche Namen Homonyme, so würde die Nomenklatur dauernd in Unruhe bleiben. Denn immer wieder könnte ein Zufall oder eine außerhalb der Nomenklatur liegende Nachforschung ergeben, daß zwei Tier-Namen von demselben Paten-Namen abgeleitet und nur verschieden transkribiert worden sind.

Beispiele: Černyševia ist homonym mit Cernysevia (via facti: vgl. B). Aber eine Tschernyschewia steht berechtigt neben Černyševia. — Tschihatscheff hat seinen Namen, je nach dem Text der betreffenden Arbeit, kyrillisch, englisch, französisch oder deutsch transkribiert. Dankbare Benützer dieser Arbeiten widmen ihre Tier-Namen dem Verfasser in der jeweils von ihm selber angewendeten Transkription. Dadurch entstehen keine Homonyme.

Als "Ratschlag" sollte allerdings in die IRZN aufgenommen werden:
"Es sollte kein Tier-Name aufgestellt werden, der sich von einem bereits veröffentlichten nur durch die Transkription unterscheidet. Geschicht das dennoch, so kann die etwaige Homonymie nur nach den Bestimmungen von Artikel 34 und 35 der IRZN beurteilt werden; hierbei ist es gleichgültig, ob Ableitung und Bedeutung dieselben sind oder nicht."

Die nachträgliche Anderung der Endung eines Art-Namens, begründet mit einem Irrtum des Autors über das Geschlecht des Paten, ist gefährlicher, als es scheinen könnte, und daher unzulässig. Auch dem eigenen Autor ist eine Änderung nicht erlaubt.

Beispiel: Vor kurzem versuchte ein Autor den von ihm aufgestellten Art-Namen smithae in smithi zu ändern, weil der Pate sich als ein Mann herausgestellt habe. Da aber in der Gattung eine ältere Art smithi schon vorhanden war, erzeugte die Änderung sofort eine neue: Die ehemalige smithae, nach der Änderung in smithi zu einem Homonym gemacht, wurde nunmehr in muelleri geändert. Kaum ein summus honos für Frau SMITH. Ein solches Spiel mit der Nomenklatur widerspricht ihrem Zweck und ist nicht zulässig.

Entscheidend für die Frage, ob Homonym oder nicht, kann nur die ursprünglich veröffentlichte Schreibweise des Tier-Namens sein. Artikel 34 und 35 sind allein maßgebend dafür, welche Unterschiede als nomenklatorisch unwirksam angesehen werden dürfen. Allerdings müßte in diesen Artikeln die Einschränkung "von derselben Ableitung und Bedeutung" gestrichen werden. Denn sonst wird die Stabilität eines Tier-Namens doch wieder von philologischen, historischen und textkritischen Erwägungen abhängig gemacht.

Beispiel: Nach Artikel 34 und 35 ist der Unterschied zwischen c und k nomenklatorisch unwirksam: Cöloceras und Köloceras sind also homonym, — allerdings nur bei "derselben Ableitung und Bedeutung". Nun hat man im Vertrauen auf diese übliche Gleichheit von C und K auch Caninia 1840 und Kaninia 1924 als Homonyme angesehen. Literarische Studien lassen aber erkennen, daß Caninia von dem lateinischen canis (Hund) abgeleitet worden ist und Kaninia von einem asiatischen Orte Kanin. Damit würden die beiden Gattungs-Namen nicht mehr dem Hauptsatz von Artikel 34 unterliegen, sondern unter dessen Einschränkung fallen. Sie würden also nebeneinander legitim werden und die inzwischen gutgläubig vorgenommene Neu-Benennung des jüngeren Homonyms würde als illegitim wieder wegfallen. Es liegt nicht im Sinne der IRZN, die durch jene Einschränkung verursachte Ungewißheit samt den möglichen Überraschungen andauern zu lassen und die Nomenklatur einem Hin und Her von Umbenennungen auszusetzen.

## Ergebnis:

Die IRZN sollten in der neuen Fassung unmißverständlich ihren Grundsatz aussprechen: "Quo modo impressum est, nomen maneat". Emendation ist nicht erlaubt. Ein Tier-Name darf privat nicht geändert werden. Auch "la recherche du parrain est interdite", wenn sie zur Änderung eines Tier-Namens führen soll.

Diakritische Zeichen sind nomenklatorisch unwirksam und erzeugen nur fakultative Varianten desselben Namens. Die Druck-Technik läßt gar keine andere Möglichkeit.

Der Unterschied zwischen "Umlaut" und "Laut" ist nomenklatorisch wirksam (ue nomenklatorisch verschieden von u, aber ue nomenklatorisch gleich ü). Da der Umlaut im Deutschen, statt diakritisch (ü), immer auch klassisch (ue) wiedergegeben werden kann, sollte die klassische Schreibweise bei der Übernahme veröffentlichter Namen erlaubt und bei der künftigen Aufstellung von Namen vorgeschrieben sein. Auch hier läßt die Druck-Technik keine andere Möglichkeit.

Wirksam ist die Änderung eines Namens nur dann, wenn in einem wichtigen Einzelfall die Kommission ihr Recht zur "Suspension der Regeln" angewendet hat.

#### Schriften:

- COOPER, G. A. & MUIR-WOOD, H. M.: Brachiopod homonyms. J. Washington Acad. Sci., 41: 195-196, Washington 1951.
- Muir-Wood, H. M.: On the question whether any two generic names or trivial names, each based upon the same surname of a person, whose name is normally written in some alphabet other than the Latin Alphabet, and each having the same termination, but differing from one another in the transliteration of the portion representing the person's name, are to be regarded as homonyms of one another. Bull. zool. Nomenclature, 6, 3: 90-92, London 1951. [1951a]
- ———: Request for a ruling on the question whether any two names, each based upon a modern patronymic, are to be regarded as homonyms of one another, when the patronymics in question are identical in spelling, but differ through the presence or absence of an umlaut or other diacritic mark.—

  Bull. 2001. Nomenclature, 6, 3: 92-94, London 1951. [1951b]
- RICHTER, RUD.: Einführung in die Zoologische Nomenklatur durch Erläuterung der Internationalen Regeln. 2., umgearbeitete Auflage. 252 S. Frankfurt a. M. 1948.
- ---: Die "Berichtigung" von Namen nach Artikel 19 IRZN, an den Fällen senkenbergii c/a senckenbergii und smithae c/a smithi. Senckenbergiana, 31: 269-272, Frankfurt a. M. 1950.

#### DIACRITIC MARKS

Note by the Secretary

Editorial Note: In the immediately preceding communication Professor Rudolf Richter discusses (in Section B) the problem involved in the formation of scientific names in cases where the words from which those names are formed bear diacritic marks. In the present Series this subject is discussed also by Dr. Key (Document 5/26), by the Nomenclature Discussion Group, Washington, D.C. (Document 5/30) and by the American Committee on Entomological Nomenclature, while in Series 3 (Family Names) the same subject is raised also by Professor Raymond C. Moore (Document 3/25). The problem here involved was raised with the International Commission, quite independently of the general problem of the emendation of names, by Dr. Helen Muir-Wood, whose application on this subject was published in September 1951 (Bull. zool. Nomencl. 6: 92-94). It is proposed to bring forward that application, together with the numerous comments received thereon, for consideration as a separate item at Copenhagen. The relevant documents will be published later in the present volume (pp. 241-251) under Case No. 20, where the question of deleting the present reference to diacritic marks in Article 20 is discussed.

By L. B. HOLTHUIS (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands)

#### Letter dated 11th April, 1952

I have finished reading your suggestions for the reform of Article 19 of the Règles (1952, Bull. zool. Nomencl. 7 (1/2): 1-60) and on the whole I support your proposals. On a few points, however, I should like to make some comments or to receive some additional information. For convenience sake with each point I am giving the paragraph in your paper with which it deals and the page of your paper on which that paragraph is found.

- (1) Your paragraph 17, p. 20. I am wondering what is exactly meant with the expression: "those cases where the author publishing a spelling for a name which differs from the original spelling of that name himself expressly makes it clear that the spelling change is intentional"; I especially should like to know what is meant with "expressly makes it clear". I am mainly afraid that various authors will give a different explanation of this expression. In my opinion the various spelling changes may be arranged in the following categories:
  - (A) The author expressly states that he proposes a new spelling, e.g., in using the expression "As the original spelling of the generic name Scyllarus by Fabricius, 1798, is incorrect, I use here the correct spelling Syllarus" or "Syllarus" (emend. pro Scyllarus) Fabricius, 1798."
  - (B) The author does not say in so many words that he proposes a new spelling for a certain generic name, but while using the new spelling he refers to the old spelling in a synonymy, e.g., in using the following clause "Syllarus arctus (Linnaeus, 1758). Synonyms: Cancer arctus Linnaeus, 1758; Scyllarus arctus Fabricius, 1798". This category may be divided into two groups:
    - (i) The emended name is used consistently by the author in his paper (except of course in the synonymy). Here two subgroups may be recognised.
      - (a) The emended name is used more than once in the just mentioned paper.
      - (b) The emended name is used only once in the paper.
    - (ii) The emended name is not used consistently by the author in his paper (apart from the use of the old spelling in the synonymy).
  - (C) The author uses a new spelling for a generic name without referring at all to the old spelling.

There is not the least doubt that in category (A) the author "expressly makes it clear that the spelling change is intentional "and the cases falling under this category are emendations. The cases falling under category (C) in the same way obviously are erroneous spelling changes. The difficulty is caused, however, by category (B). The fact that the author uses a new spelling for a scientific name, referring at the same time to the old spelling, in my opinion makes it clear (except in two cases) that the spelling change is intentional. The two exceptions are the cases falling in group (B) (ii) and (B) (i) (b). If the author does not use the new spelling consistently, the possibility that this spelling change is due to some lapsus is large; this is likewise the case when the author mentions the new spelling only once in his paper, not having a need to use it more. In the latter case the author uses the new name consistently but still the chances are large that this new spelling is only due to a lapsus. In my opinion, therefore, the cases falling under categories (A) and (B) (i) (a) deal with emendations, all other cases with erroneous spelling changes. I am not certain whether this opinion is shared by the Commission and I should appreciate some elucidation on this subject.

(2) Your paragraph 20, p. 23. The case of Myolepta Newman, 1838, and Leptomya Walker, 1851, made me wonder whether it always is possible to distinguish satisfactorily between a spelling change and a new name, and whether these two expressions have been sharply defined. How are we to know when somebody introduces a name like Walker's Leptomya whether this is a new name or that it just is a spelling change, in the case that the author himself gives no information on that point as often happened in old publications. When an author in the text expressly states that he proposes a new name, or when he uses indications like nom. nov., nov., or mihi placed after the new name, then there of course is not the least doubt that that name indeed is a new name. When an author in his paper uses a new spelling of a scientific name inconsistently, or when he uses such a spelling citing as the author of the name the author of a very similar name, there is little doubt that we have to do with a spelling change. But how are we to decide whether any other name which does not fit in the just mentioned categories is a new name or a spelling change? We of course are inclined to consider a name which is not clearly a new name and which differs only little in its spelling from a name which already exists for the taxonomic unit in question to be a spelling change; while a name which in its spelling differs considerably from any name ever employed for the taxonomic unit in question generally will be considered to be a new name. In several instances, however, it will be hardly possible to make out with certainty whether such a name is a new name or a spelling change. It therefore seems highly desirable to me to have an unambiguous definition for these two kinds of name. We thus have to do here with with three categories: (1) the names which are clearly indicated as new names, (2) the names which are published with information clearly showing them to be erroneous spelling changes, and (3) the names which are published without information making it possible to find out whether they are new names or erroneous spelling changes. Personally I am unable to find any satisfactory solution to divide category (3)

into two sharply defined groups, one of which contains those names which probably are intended to be new names, the other containing the names which might be erroneous spelling changes. Therefore the only way I see to deal with this question is to consider all names falling under group (3) to be either erroneous spelling changes or new names. Group (3) contains a large assembly of names ranging from (a) names which in their spelling differ only slightly from an older name given to the same taxonomic unit, to (b) names which show not the least resemblance to any older name used for the same taxonomic unit. It is extremely illogical to consider names as those mentioned above under (b) to be erroneous spelling changes, and this makes it illogical at the same time to consider all of group (3) as erroneous spelling changes. There is, however, no objection to consider all the names falling in group (3) to be new names, as very often new names in their spelling differ extremely little from the name which they are to replace, so one might find new names both in groups (a) and (b) mentioned above. Therefore I would suggest that the names falling in groups (1) and (3) above be considered to constitute new names, while solely the names from group (2) be treated as erroneous spelling changes. Summarizing we get the following definitions for the expression new name and erroneous spelling change:

- (A) New name. A new name is a name—other than an emendation or an erroneous spelling change—which either has been expressly indicated by its author as a new name, or differs in its spelling from any other name previously used for the taxonomic unit for which it is proposed.
- (B) Erroneous spelling change. An erroneous spelling change is a name—other than an emendation—which in its spelling resembles a second name previously used for the same taxonomic unit, while in the publication in which the first name is used for the first time either (a) both the first and the second names are inconsistently used for the taxonomic unit in question, or (b) the author of the second name is cited to be the author of the first.
- (3) Your paragraph 29, p. 32. It is not clear to me how one can ascertain that a faulty transliteration has been made. I know that in several instances some zoologists consider a certain spelling of a name an obvious faulty transliteration, while others do not think the same spelling a faulty transliteration at all. I believe that a definition making it clear when a spelling has to be considered a faulty transliteration is of great importance. I perhaps may give here an example. The generic name Oplophorus for a shrimp originally was spelled by its author (H. Milne Edwards, 1837) in this way. At the present time a number of zoologists use the original spelling for this name, while others have emended it to Hoplophorus, claiming Oplophorus to be a faulty transliteration. The name Oplophorus will be used to illustrate the various cases mentioned in the following enumeration. As far as I can see, the following reasons can be given to prove that a certain spelling is a faulty transliteration:

- (a) The author in proposing a new name [Oplophorus] gives, to show the derivation of this name, the Greek (or Cyrillic) spelling of the word or words on which his name is based  $[\delta \pi \lambda o v] = \text{weapon}$ ,  $\phi o \rho \alpha = \text{to bear}$ . The spelling of these Greek (or Cyrillic) words or this Greek (or Cyrillic) word makes it clear that the transliteration is incorrect.
- (b) The author states that his new name [Oplophorus] is derived from (a) certain Greek (or Cyrillic) word(s) of which he gives the meaning, without giving the actual Greek (or Cyrillic) spelling ["derived from the Greek words for weapon and to bear"].
- (c) The author besides the Latin name for his new taxonomic unit, provides a name in his own language which is a translation of the Greek (or Cyrillic) word(s) from which the Latin name is derived. The author, however, does not expressly give the derivation of his Latin name [Oplophorus, der Waffenträger].
- (d) The author does not give the derivation of the Latin name used by him, but from the original description given of the animal it becomes clear that the name is a transliteration of (a) Greek or Cyrillic word(s) indicating for instance a salient character of the animal. [In the case of Oplophorus the author might mention that the body of the animal bears strong spines.]
- (e) The author gives no derivation of the name used by him, while the other data provided in the original description also give no clue as to the derivation of the name, but the name itself suggests that it is derived from (a) certain Greek or Cyrillic word(s).

Some authors change a faulty transliteration in all five cases, while several others will reason that when the author does not expressly give the derivation of his name, it never can be made certain that he indeed committed a faulty transliteration, as he might have used a meaningless arrangement of letters which only by chance resembles a Greek or Cyrillic word. My personal opinion is that indeed a possible faulty transliteration should be corrected only when it conclusively can be proven to be a faulty transliteration from data contained in the original publication, and that thus only the cases mentioned here under (a) and (b) should fall under the definition of faulty transliteration.

(4) Your paragraph 29, p. 32. The considerations put forward in my paragraph (3) have been given only in case that automatic corrections of faulty transliterations should come into force. Of the two possible regulations concerning faulty transliterations given in your paragraph 29, I personally prefer the one mentioned by you under (a), which makes no difference between the names published before and those published after the new schedule comes into force. It is my belief that the  $R\grave{e}gles$  should be as simple as possible and

any complication which is not highly necessary should be avoided. In my opinion we should have either automatic corrections of all faulty transliterations as defined in my paragraph (3), irrespective of the date of publication of the original names, or we should have no correction of faulty transliterations at all, but those made by the Commission.

- (5) Your paragraph 32, p. 34. The objective test proposed in your paragraph 32 in my opinion limits the possibilities for emendation too much. I should like to see emendations also permitted in the following cases:
  - (a) The author gives the derivation of the name proposed by him and from this derivation it becomes clear that the name has been mis-spelled. Example: If an author proposes the name Livoneca for a new genus and remarks that this name is an anagram of the word Caroline, subsequent authors have the right to correct the generic name to Lironeca.
  - (b) In the original description an incorrectly spelled name is used, but the name has been correctly spelled at more than one place in the same paper (published at the same time), e.g., in the explanation of a figure, etc. If both the correct and the incorrect spelling have been used once (or both more than once) in the original paper, the decision of the first reviser should be followed.
- (6) Your paragraph 32, p. 34. I believe that for the sake of stability it is preferable to insist that a correction of a spelling mistake—apart from those mistakes enumerated in my paragraph (5)—should be accepted only if the correction and the spelling mistake are published in the same paper at the same time. The time limit of one year between the publication of the correction and the spelling mistake might prove to become a source of uncertainty, the more so since in several old books the exact date of publication of the various parts is not known, while of most publications the day or even the month of publication cannot be discovered, so that in a very large percentage of the cases it will be next to impossible to find out whether the erratum has been published within twelve months from the publication of the spelling mistake.
- (7) Your paragraph 40, p. 41. I should like to see a special rule concerning the emendation of incorrect endings of scientific names which are based on modern patronymics. During the Thirteenth International Congress of Zoology held in Paris in 1948 it was decided that where a name published in a form which contravenes any of the provisions contained in Articles 14–16, 18 or Article 20 of the Règles, the error so committed is automatically to be corrected by subsequent authors (1950, Bull. zool. Nomencl. 4 (4/6): 67, 68). At the same time Opinion 8 was cancelled. The first difficulty which I encountered in handling this decision was with the ending i or ii of trivial names. The ways in which a name ending in ii is proposed may be arranged in the following categories:

- (a) The author proposes such a name and states expressly to whom this name is dedicated. Example: In proposing the new name X-us rappii the author states it to be named in honour of a Mr. Rapp.
- (b) The author proposing the new name does not expressly state the name as being given in honour of a certain person, but in the paper in which the name is proposed the name of a person whose name is such that the new species might have been named for him is mentioned. Example: The author of X-us rappii mentions in the paper containing the original description of this species that he received material or help from a Mr. Rapp, or he names Rapp as the author of a scientific term.
- (c) The author in the paper in which he proposes a new name does not mention the name of any person to whom the new species might have been dedicated.

The names belonging to category (a) without any doubt should be emended automatically. (In the example thus X-us rappii should be emended to X-us rappi.) Concerning the names in category (b) it can be claimed that there is no definite proof that the scientific name in question has been given in honour of a certain person—though this possibility is large—and that anyone has the right to change here the original spelling. If this argument is accepted the seeming inconsistency in the application of the ending "-i" or "-ii" to scientific names, which seeming inconsistency existed before the decision of the Paris Congress would not be much lessened and to ascertain whether a name should be written with the ending "-i" or "-ii" one again should always have to consult the original publication. This all also is true for category (c), since here there is still less evidence that the scientific name is based on a modern patronymic, or on a certain modern patronymic (in the case of X-us rappii one even would not be certain whether this name is given in honour of a Mr. Rapp or a Signor Rappi). As the number of modern patronymics ending in "i" is much smaller than that of the names ending in any of the other 25 letters of the alphabet the most practical solution for the present problem seems to me to be a clause inserted in the Règles, which states that the ending "-ii" should always automatically be emended to "-i", unless it is evident from the original publication that the scientific name is based on a modern patronymic ending in an "-i". Furthermore, it should be stated that a scientific name should be considered to have been based on a modern patronymic not only if the author expressly states that he dedicated the scientific name to the person bearing the patronymic in question, but also if in the paper in which the scientific name has originally been proposed a patronymic is used in some way or other, which patronymic has such a spelling that it is possible for the scientific name to have been based on it. This last statement should equally apply to generic and trivial names.

(8) Your paragraph 40, p. 41. It probably will be worth while to make it specially clear that scientific names based on modern patronymics only can be emended if it becomes clear from evidence contained in the paper containing the original publication of the scientific name in question, that this scientific name has been incorrectly spelled. A nice example is that of the Mangrove crab Aratus pisoni (H. Milne Edwards). In the original description of this crab H. Milne Edwards gave it the name "Sésarme de Pison.-S.[esarma] Pisonii". H. Milne Edwards in a footnote refers to a publication, which makes it clear that his "Pison" is the Dutch author Gulielmus (or Willem) Piso, who in 1648 published a book on Brazil in which a figure of this crab is given. According to a Dutch biography Piso's name originally probably was Guillaume Dupuis, which has been latinised to Gulielmus Piso. In Dutch literature he usually is indicated as Willem Piso. H. Milne Edwards probably gallicized the name Piso to Pison, and to obtain the trivial name for his mangrove crab he latinized the (Latin) name Piso to Pisonius, the genitive of which of course is Pisonii. Which of the names Piso, Pison, Pisonius or Dupuis have we to accept as the correct name of the man for whom H. Milne Edwards named his crab and what is the correct genitive to be used for the trivial name of the crab; pisoi (the genitive of the modern name Piso), pisonis (the genitive of the Latin name Piso), pisoni (the genitive of the modern name Pison), pisonii (the genitive of the Latin name Pisonius), or dupuisi (the genitive of the modern name Dupuis)? In my opinion the answer to the first of these two questions is that the name Piso is the only correct name for the person mentioned here; the name Dupuis might have had a chance if it could have been proved that Piso indeed had been known under that name. As to the trivial name it seems to me that pisoni must be used here, since H. Milne Edwards consistently used the name Pison in his book in which he proposed the new species Sesarma Pisonii. The fact that information not included in this book shows the name Piso to be the correct name for the person to whom H. Milne Edwards dedicated his new species, in my opinion should not be of influence on this decision.

By D. K. McE. KEVAN (School of Agriculture, Zoology Section, University of Nottingham, Sutton Bonington, Loughborough, England)

Enclosure to a latter dated 29th April 1952

# EMENDATION OF NAMES: COMMENTS ON MATTERS DISCUSSED IN PART 1/2 OF VOLUME 7 OF THE "BULLETIN OF ZOOLOGICAL NOMENCLATURE"

I am in agreement with most of what is suggested in Parts 1/2 of Vol. 7 of the Bulletin.

Whatever may be decided, however, in respect of trivial names, I wish to express my hope that in the case of generic names, the original orthography of the name as published be accepted, whether any error of any sort appears to be "evident" or not. The only exception to this which I should find acceptable would be in the case of a name appearing in two forms in the same work. The more correct of the two\* would be the accepted orthography, irrespective of page priority or whether the genus had actually been described by the time the page of its first correct spelling had been reached or not. Where there is any doubt about what is the correct spelling (e.g., in Barbaric words or where the gender could be of more than one sort), the spelling to be accepted would be that used in the full generic description, not in the first use of the name, nor in a synoptic key in advance of the generic description.

If a correction (clearly stated to be such) is published by the original author in the same volume as the generic description, this shall be accepted as the correct name, irrespective of any other consideration. In the case of works appearing in book form or in other than journals or serial publications, it would probably be necessary to permit a correction in a volume later than the one in which the original description occurred but I suggest that a maximum of two years between the description and the correction should be permitted. In the case of journals and serial publications, if a correction were published within a year in the same publication but a later volume, the correction should be valid.

I would be willing to accept the principle of automatic correction due to incorrect spelling or transliteration in the case of Personal names (either ancient or modern) but I should not wish to support the correction of incorrect transliteration in any other case, e.g., I would support the automatic correction of Mathewsia to Matthewsia if the person in question did have two "t's" in his name but I should not support the emendation of Eyprepocnemis to Euprepocnemis on the grounds of transliteration.

<sup>\*</sup> Providing that the incorrect spelling is used less frequently in the work than the correct.

The above remarks on transliteration apply only to names published before an accepted set of rules for transliteration are incorporated into the Code. If incorrect transliteration is used after such incorporation, the name shall be subject to automatic correction.

Where no set of rules for the transliteration of any particular alphabet have previously been published in the Code, names derived from words normally written in such an alphabet will not be subject to correction unless described after the incorporation of an appropriate set of rules in the Code.

The gender of incorrectly transliterated words should, unless the original author makes it clear by the use of the appropriate inflexion of the trivial name, be regarded as neuter, Barbaric words should all be regarded as neuter, irrespective of their gender in the original language.

### By THEODOR HALTENORTH (Museum, München, Germany)

Statement dated 14th May, 1952 communicated by Professor E. M. Hering

I. Die im "Richter" zu Art. 19 der Regeln gegebenen Erlauterungen sollten verbindlich gemacht werden, zumal schon lange danach gehandelt wird, womit sich alle weiteren Emendierungsvorschläge erübrigen.

## **Explanatory Note**

The foregoing comment was prepared by Dr. Haltenorth in response to an invitation by Professor E. M. Hering who had prepared the following synopsis of the problems at issue for consideration by German zoologists.

## I. Vorschläge für eine Änderung des Art. 19 der "Internationalen Regeln der Zoologischen Nomenklatur"

Die gegenwärtige Fassung des Art. 19 der Nomenklaturregeln: "Art. 19.— Die ursprüngliche Schreibung eines Namens ist beizubehalten, falls nicht ein Schreib-oder Druckfehler oder ein Fehler der Umschreibung nachzuweisen ist", ist mehr-deutig und unvollständig, da keine objektiven Kriterien angegeben sind, ob ein Name zu emendieren ist oder nicht. Das hat zu vielfachen Divergenzen in der Behandlung der Namen geführt. Eine künftige Neufassung muss solche objektiven Kriterien enthalten.

Die gegenwärtige Fassung bezicht sich nur auf Falschbildungen an dörtern, aus der griechischen und lateinischen Sprache stammend. Kenntnis der Bildungs-und Schreibungsgesetze der klassischen Sprachen sind in dauernd zunehmendem Masse nicht mehr Allgemeingut der Zoologen und Palaeontologen.

Art. 19 nimmt keine Rücksicht auf die von den meisten Zoologen erstrebte Stabilität in der Nomenklatur.

Allgemeinwunsch der Zoologen etc. ist deshalb, dass

- (a) Emendierungen nur noch auf Grund unzweideutiger und objektiver Kriterien vorgenommen werden,
- (b) die mehr und mehr begrenzte Kenntnis klassischer Sprachen berücksichtigt wird und etymologisch-philologische Gründe in geringerem Unfang herangezogen werden,
- (c) durch Beschränkung der Zulässigkeit der Emendierung nomenklatorische Stabilität in grösserem Umfang gewährleister wird.

Es wird daher im Auftrag des 13. Internationalen Kongr. f. Zoologie, Paris 1948, zur Entscheidung auf dem 14. Kongress in Kopenhagen, 1953, die folgende Kompromissfassung für den Art. 19 vorgeschlagen.

(1) Die im Art. 19 verwendeten Termini haben eine objektive Definition zu erhalten.

- (2) (a) Die Neufassung enthält eine Erklärung, dass die ursprüng liche Schreibweise der Namen beizubehalten ist, wenn sie nicht eine fehlerhafte Umschreibung oder einen orthographischen Fehler enthält.
  - (b) Sie hat eine Bestimmung über die Klasse von Namen zu enthalten, die automatischer Emendierung unterliegen, wenn solche Fehler verliegen.
  - (c) Sie regelt die Behandlung von Namen, die vor der Inkraftsetzung des revidierten Artikels 19 verwendet wurden, auf die aber Abs. b nicht zutrifft.
- (3) Die Neufassung regelt die Behandlung von Namen, die nach Einsetzen der Gültigkeit des revidierten Art. 19 emendient werden sollen. Automatische Emendierung soll erfolgen.
  - (a) wenn der wissenschaftliche Name einem klassischen Namen entspricht (z.B. appolo für Apollo), und Wenn es sich um den Namen eines Ortes handelt, der in den klassischen Sprachen verwendet wurde.
  - (b) Handelt es sich um Namen von modernen Örtlichkeiten, die innerhalb von 12 Monaten im gleichen Bande wie die Veröffentlichung, korrigiert wurden, wobei aber die Korrektur inkorrekt war, soll die Internationale Kommission für zoologische Nomenklatur (im folgenden kurz als I.K. bezeichnet) entscheiden, ob Originalschreibweise oder Kerrektur gültig sein soll, oder ob in anderer Form emendiert wird.
  - (c) Automatische Emendierung erfolgt auch dort, wo nach Inkraftsetzung der neuen Fassung ein Name gebildet wurde, der auf der Latinisierung eines Wortes basiert, das nicht aus einer der klassischen Sprachen, aber aus einer der in den "Ratschlagen" angeführten Sprachen stammt, wenn die dort angegebenen Regeln nicht beachtet wurden.
- (4) Ist vor Inkraftsetzung des revidierten Artikels 19 eine Emendierung erfolgt, die nicht 5a-c betrifft, aber ebenfalls auf falscher Unsehreibung oder orthographischen Fehler zurückgeht, soll die I.K. auf Antrag von Spezialisten entscheiden, ob die Emendation gültig sein soll.
- (5) Der künftige Art. 19 soll bestimmen, dassalle nichtin 3 genannten (also die der automatischen Namen ausschlieslich von der I.K. auf Antrag der Spezialisten emendiert werden können.
- (6) Der neue Art. 19 hat die Bestimmung zu enthalten, dass die I.K. in den Fällen von 3b, 4 und 5 das gleiche Verfahren wie bei der Behandlung von Anträgen der Spezialisten auf Gebrauch ihrer Vollmachten anzuwenden habe: Veröffentlichung der Anträge und Entscheidung auf Grund der ihr daraufhin von den Spezialisten etc. zugegangenen Informationen. Dabei soll weniger Rücksicht auf etymologisch-philologische Erwägungen, mehr auf den herrschenden Gebrauch und die Erzielung nomenklatorischer Stabilität genommen werden.
- (7) Als "Ratschlag" ist einsufügen, dass keine gegenwärtig gebräuchliche Emendation, die mach dem revidierten Artikel zu Gunsten der Originalschreibweise aufzugeben ist, verworfen werde, bis eine Entscheidung der I.K.erfolgt ist.

- (8) Wo eine unrichtige Emendation erfolgte, die von den Spezialisten akzeptiert wurde, sell die I.K. ermächtigt werden, nach dem in 6 genannten Verfahren die unrichtige Emendation als gültig anzuschen.
- (9) Als "Ratschlag" wird empfohlen, dass der *Autor* eines neuen Namens dessen *Ursprung angibt* oder erklärt, dasses sich um eine willkürliche Wortbildung handelt, bei Artnamen, ob es sich um ein Substantiv im Nominativ oder ein Adjektiv handelt.
- (10) Es ist eine Bestimmung einzufügen, durch die I.K. ermächtigt wird, bei der Behandlung eine Antrages auf Emendie rung eines Artnamens die Entscheidung zu traffen, dass die Regelung der Schreibweise auch auf den gleichen Namen in anderen taxonomischen Einheiten anzuwenden ist (um Wiederholungen zu vermeiden).
- (11) E soll bestimmt werden, dass Emendationen, die bereits in "Opinions" order durch Einsetzung in die "Offizielle Liste" vor Inkraftsetzung der Neufassung bestätigt wurden, ihre Gültigkeit behalten.
- (12) Der jetzige Artikel 19 und die provisorischen Anordnungen des Pariser Kongresses, 1948, sind mit Inkraftsetzung der Neufassung zu widerrufen.
- (13) Um das neue Gesetz der Emendation mit dem der Homonymie in Einklang zu bringen, werde angeordnet, dass
  - (a) die gültige Emendation die Originalschreibweiss ersetzt, deren Publikationedatum und Autorschaft erhalten bleibt.
  - (b) bei einer ungültign Emendation diese als selbstünständige-veröffentlichter Name angeschen wird, der Priorität vom Tatum der Veröffentlichung an besitzt und desser Autoschaft seinem Schöpfer sugeschrieben wird und als Ersatzname zur Verfügung steht (wenn nicht die Anderung so unerheblich ist, dass die Emendation ein Homonym zur Originalschrebweise ist). Jeder spätere Gebrauch eines solchen Namens für eine andere taxonomische Einheit ist als Homonym anzusehen.
  - (c) Fehlarhafte Schreibweise einer Emendation hat keinen Status in der Nomenklatur, kann die ursprüngliche Schreibweise nie ersetzen und keine spätere Verwendung des Namens praeokkupieren.
  - (d) Fehlerhafte Originalschreibweise besitzt ebenfalls keinen Status in der Nomenklatur.
- (14) Im Zusammenhang mit dem Gesetz der Emendation sollen Bestimmungen aufgenommen werden
  - (a) für Fälle, bei denen mehrere Emendationen eines Namens vorliegan; hier ist das *Prioritätsprinzip* anzuwenden,
  - (b) für eine Festlegung des Verfahrens für Wahl des Bindevokals zwischen den beiden Elementen eines zusammengesetzten Namens,
  - (c) für die Bildung adjektiviseher Namen auf Basis von Ortsbezeichnungen, bei denen die Endung "-ensis" verwendet wird ("-ensis" oder "-iensis").

#### By LEO SHELJUZHKO

(Zoologische Sammlung des Bayerischen Staates, München, Germany)

(Statement dated 16th May, 1952 communicated by Professor E. M. Hering)

(Editorial Note: For an explanation of the number cited by Dr. Sheljuzhko in the following communication see the document by Professor E. M. Hering annexed to the communication received from Dr. Haltenorth (Document 5/20).)

# STELLUNGSNAHME ZU DEN PROBLEMEN DER ZOOLOGISCHEN NOMENKLATUR

Art. 19. Es wäre wohl anzunehmen, dass es für Zwecke der Nomenklatur bei der Schreibweise der Namen einzig und allein auf die Stabilität ankommt und nicht darauf, ob ein Name grammatikalisch richtig order falsch gerchrieben ist. Die einzige Möglichkeit die erwünschte Stabilität zu erreichen, besteht, meiner Ansicht nach, darin, in jedem Fall die ursprüngliche Schreibweise der Namen beizubehalten und jede automatische Emendierung derselben zu untersagen. Nur in Fällen, wo ein unzweideutiger Druck—oder Schreibfehler besteht, könnte den Spezialisten die Möglichkeit gegeben werden, bei der INK einen Antrage einer Korrektur solch eines Fehlers zu stellen. Dabei hätte die INK das Recht, die vorgeschlagene Korrektur zu akzeptieren oder zu verwerfen (im letzteren Falle wäre der Name als eine willkürliche Wortbildung anzusprechen). Bis zur Entscheidung der INK bleibt jedenfalls die ursprüngliche Schreibweise gültig und massgebend.

#### By W. J. ARKELL, M.A., D.Sc., F.R.S.

(Sedgwick Museum, Cambridge University, Cambridge)

Extract from a letter dated 23rd May, 1952

I have read with admiration your most thorough and clear papers in the *Bull. zool. Nomencl.* 7, parts 1-6.

.... On Z.N.(S.)356 (Article 19), I have no comments, and I should be content to see these ... go through as expounded in your papers.

#### **DOCUMENT 5/23**

#### By J. R. DYMOND

(University of Toronto, Department of Zoology, Toronto, Canada)

Statement received on 27th May, 1952

I approve the suggestions for the clarification of the Law of Emendation and for the restriction of the scope of that Law put forward in Volume 7, parts 1 and 2 of the Bull. zool. Nomencl.

I consider that provision for the minimum number of changes in present usage should weigh strongly in considering the modifications to be made in any of the Règles. I agree that the present trend of opinion among zoologists is in the direction of a greater desire for stability in nomenclature.

#### By ERICH M. HERING

(Abteilungsleiter am Zoologischem Museum der Humboldt-Universität zu Berlin)

Statement received on 7th June, 1952

# STELLUNGNAHME ZU DEM FÜR DIE NAUFASSUNG DER "RÈGLES VORGESEHENEN "GESETZ DER EMENDATION"

Der Stab der Zoologen am Zoologischen Museum der Humboldt-Universität zu Berlin unterstützt die in  $Bull.\ zool.\ Nomencl:$  7 (1/2), 9–60 ausgeführten Vorschläge mit 13 von 14 Stimmen mit den folgenden Ausnahmen:

- (1) Para. 21 (1.c., pp. 23-24): Für den Vorschlag stimmen 3, dagegen 11.
- (2) Para. 54 (1.c., p. 51): 12 von 14 stimmen für die Endung-ensis.
- (3) Para. 52. Zur Frage des Bindevokals wird keine Stellung = genommen, bis ein philologisches Gutachten vorliegt.

Völlig einverstanden mit den Vorschlägen (1.c., pp. 9-60) sind nach Mitteilung von Dr. Walter Forster von der Zoologischen Sammlung des Bayerischen Staates, München, 11 vor 12 befragten Zoologen des Museums München.

#### By HENNING LEMCHE

(Universitetets Zoologiska Museum, Copenhagen)

Letter dated 14th June, 1952

Having now finished the reading of the Bull. zool. Nomencl. 7: 1-60, I want to make some comments that seems to me very important.

First, I have to tell you that I am very much impressed by the amount of labour, skill and interest you have laid down in your analysis, and I feel that you have added substantially to our understanding of the difficulties facing us. It is so much more important for me to emphasize this positive aspect as, although I hate to do it, I have to make some very severe criticisms of the means you have chosen. In fact, I feel that my criticism could not have been given any positive proposals of value without the foundation laid down by you, and so I hope that you will feel my deep appreciation of your work behind all differences of opinion.

There are two kinds of clarity. (a) the lucid and short one, making the essential thing easily understood, even at the risk of missing some detail. (b) the profound one trying to take everything into account, even at the risk of being complicate.

In Paris, I am fairly sure, nearly every professional zoologist aimed at (a), whereas it now seems to appear that you were aiming at (b). But (b) will afford specially trained "lawyers" to interpret the Rules (or "Laws", as you have started to call them). But zoologists are not interested in judicial matters. We want "simple, clear-cut Rules" which can be interpreted by a glance. This so much more, as many zoologists are not sufficiently familiar with the English language to understand intricate formulations. E.g., although I have now been speaking English nearly every day in a year, on top of my earlier knowledge, I still used more than half an hour to find the meaning of the sentence Bull. zool. Nomencl. 7: 55 (3) (b). No normal zoologist would have that patience. Seriously, I am convinced that if we make such Rules at the Congress in Copenhagen, we (and the Rules) will immediately fall into such a disrespect as to loose every influence on the future fate of zoological nomenclature.

To be positive—and this is what is needed—let me put forward a set of Rules that to me appears appropriate for all the matters concerned in your propositions of paragraph 56 (1-11). The only alterations \* are those necessary to fit in with a difference in opinion as to the number of cases to be laid before the Commission.

<sup>\*</sup> In the meaning.

"The original spelling of a scientific name is to be maintained, with the following exceptions:

- (a) If a name is based on the name of a Personage of Classical Greek or Roman Antiquity (deity or human) or is a name of a place in the ancient world, any error of transliteration or a spelling mistake is to be automatically corrected—again with the exception that if that name has been generally accepted in the case in question for more than 50 years in its incorrect form, this last form is to be maintained.
- (b) A spelling mistake is validly corrected if that mistake is—within a period of a year after its publication—expressly corrected by a corrigendum or similar note by the author or editor in the same periodical or volume in which it was first published.
- (c) The Commission has the power to set aside separately in any single case the prescriptions of all the Rules given in this paragraph."

Let me add that I regard your clear definitions of "spelling mistakes" etc. as extremely valuable and worth putting into the Rules as explanatory matters outside the actual Articles themselves.

In the above, no notice has been taken to the problems of names of recent persons etc. that have been under debate at Paris. Of course the above formula is to be changed so as to include all these other parts of the rulings. Having no access to any copy of the new Rules, it is for the moment impossible for me to do that inclusion myself.

By K. H. L. KEY (Commonwealth Scientific and Industrial Research Organisation, Division of Entomology, Canberra, Australia)

#### (1) Letter dated 23rd June, 1952

Your letter of 15th March reached me some time ago. I have delayed replying to it until I had had the opportunity to study your paper on emendation of names published in Parts 1/2 of Volume 7 of the *Bulletin*. I have now done this, and can appreciate the great amount of thought and effort that has gone into the preparation of your proposals.

I realise that in your position as Secretary of the Commission your efforts would necessarily be directed towards achieving a compromise between the extreme schools of thought on the subject of emendation. Since I am not subject to any such restriction, and since I consider it desirable that the point of view which I have already put to you in correspondence should be set out in the form of a reasoned statement for consideration in connection with the Fourteenth Congress, I have prepared a criticism of your paper, with an outline of alternative proposals, for publication in the *Bulletin*. Two copies of this paper are herewith attached.

I am sure there is no need for me to emphasise that the criticisms I am making carry no personal element, but are intended purely to promote discussion with a view to assisting in the formulation, ultimately, of provisions of the best possible kind for regulating this aspect of zoological nomenclature.

# Enclosure to Dr. K. H. L. Key's letter of 23rd June, 1952 CRITICISM OF MR. FRANCIS HEMMING'S PROPOSALS FOR THE EMENDATION OF ZOOLOGICAL NAMES

By K. H. L. KEY, D.Sc.

(Division of Entomology, Commonwealth Scientific and Industrial Research Organisation, Canberra)

In his paper entitled "The Emendation of Zoological Names: An Appeal to Zoologists for Advice" (1950, Bull. zool. Nomencl. 7: 4–60), Mr. Francis Hemming has presented a masterly analysis of the problems involved—an analysis which it would be difficult to fault if all of his premisses could be accepted. It is because I myself am not able to accept all of those premisses, and suspect that there may be other zoologists of like mind, that I join issue with Mr. Hemming in the present contribution.

Bull. zool. Nomencl., vol. 10, Parts 3/5 (July, 1953)

#### Examination of Mr. Hemming's Thesis

The first criticism I would make of Mr. Hemming's premisses relates to the distinction he draws between "correction" of names formed in contravention of Articles 14, 15, 16, 18, and 20, and "emendation" of names on the grounds listed in Article 19. I can find no justification for such a distinction. The Code as it stands contains no direct reference to either "correction" or "emendation". There is no reference to the action that should be taken in regard to names formed in contravention of Articles 14, 15, 16, 18, or 20, nor, in contrast to Mr. Hemming (loc. cit., p. 14), would I interpret Article 19 as giving a clear instruction that a name should be emended if it contains one of the types of errors specified in the Article. Admittedly the Thirteenth International Congress of Zoology resolved that words should be inserted in the Code to make it clear that names formed in contravention of Articles 14, 15, 16, 18, or 20 should be automatically corrected (1950, Bull. zool. Nomencl. 4:68), but that decision does not yet form part of the Code, and should not be allowed to prejudice discussion of the general question of the correction or emendation of names. As regards Article 19, the wording of the Code sets a limit to the range of circumstances in which the original orthography of a name " is to be " preserved. It does not state that when that limit is transgressed the name "is to be" emended. There is a third alternative, which I would consider to be the strict meaning of the Article, namely that, if one of the specified types of error has been made, the zoologist is relieved of the obligation to preserve the original orthography.

The problems of emendations or corrections arising from contravention of Articles 14, 15, 16, 18, and 20, and from consideration of Article 19, are thus broadly of the same nature, and in all instances provision has yet to be made in the Code to deal with them. Further, when all these Articles are taken together, the burden placed on the non-classical zoologist and the possibilities of instability being introduced into accepted nomenclature as a result of emendation of names are seen to be much more extensive than if emendations arising from Article 19 alone are considered. For these reasons I consider that the Fourteenth International Congress of Zoology should cover the whole field of corrections or emendations and should not recognise the distinction made by Mr. Hemming.

In this connection the first question to be decided is whether emendation is to be permitted at all. Since it would be clearly absurd to have mandatory provisions dealing with the formation of names and not to have mandatory provision for correcting contraventions of those provisions, this question raises the further issue of whether Articles 14, 15, 16, 18, and 20 ought to be mandatory or whether they should be given the force of Recommendations only. I consider that this question, also, should be brought within the field of study of the Fourteenth Congress in connection with the emendation of names. It may be noted that the mandatory provisions proposed by Mr. Hemming for the emendation of "errors of transliteration" are to deal with infringements of

provisions for transliteration from the Greek alphabet, and proposed provisions for transliteration from other alphabets, which are to have the force of Recommendations only. It seems very questionable whether such a procedure is admissible.

My second criticism of Mr. Hemming's premisses relates to the principles he has enunciated in section (4) of paragraph 55 (loc. cit., pp. 52–53), and in greater detail in earlier sections of his paper. The theme underlying these principles, and indeed underlying the whole paper, is that the best solution of the problem will be a compromise between two extreme views. These views are not only in clear opposition to each other, but reflect fundamentally different conceptions of the sort of consideration that is relevant to a system of zoological nomenclature. In such circumstances a compromise is apt to lack whatever rationale may have sustained the two opposing views, and even to be worse than either of them. A more profitable approach would seem to be to seek for basic criteria related to the practical aim in view and to test the opposing views by those criteria—in other words, to examine the validity or appropriateness of those views and seek in that way to reach a decision as between them. It is this that I propose to try to do in the present paper.

It seems evident that the only rules that zoologists as a body should require individual zoologists to observe in the course of their work are those which (in the present instance) are essential if zoological nomenclature is to serve its practical purpose, and the disregard of which would lead to confusion and the defeat of that purpose. It is quite wrong for a minority or even a majority of zoologists to attempt to force upon the rest any observances that have merely an aesthetic, traditional, or other similar significance, whose value cannot be demonstrated by rational argument, and on which the widest differences of individual taste and opinion exist. When the position of what I may call the "classicists" is examined in the light of these considerations, they would seem to have no case. Indeed, when one learns that, of all the errors of transliteration or spelling that can be committed, this group of zoologists is most concerned with those that do violence to Personages of ancient Greece or Rome, one is inclined to lose all respect for their viewpoint. A further objection to the admission of such aesthetic considerations as relevant in nomenclature is that they are liable to change (as indeed they have changed), and that a system devised to take account of them at one time may be out of tune with them at a later time.

A third most important criticism of Mr. Hemming's proposals is that, in attempting, in accordance with his aim of producing a compromise scheme, to take into account many conflicting considerations, he has given us a scheme of almost fantastic complexity. It takes him more than fifty pages to discuss the problem, and six pages to summarise the proposals in a form comparable to that in which they would appear as part of the International Code. Even those zoologists who have no knowledge of Latin or Greek would be able to form or emend names "correctly" by reference to suitable texts or by consulting a classical colleague. It is doubtful whether to do that would absorb a greater part of their time than to master the body of law by which, under

these proposals, they would be enabled largely to avoid the necessity. On the other hand, a zoologist with an adequate knowledge of the classical languages would have to do a great deal of work that was formerly unnecessary. Further, the majority of emendations sanctioned by the proposals would be made by the International Commission, to which application would have to be made, and which would advertise the proposed emendation and wait upon advice from interested specialists. All this would involve considerable trouble and delay.

As against the above criticisms of Mr. Hemming's proposals, one can only commend the safeguards he introduces to prevent confusion and instability from arising through the rejection by individual zoologists of emendations already published which did not conform to the rules of emendation as proposed.

#### Alternative Proposals

I consider that the following outline proposals should provide a satisfactory basis for the drafting of provisions governing name formation and emendation which will safeguard all the essential needs of a system of nomenclature, will make for stability in nomenclature, will be simple to apply, and will preserve to the greatest possible extent the freedom of the individual zoologist and the principle of priority.

### (a) Rules for the Formation of Names

The important points for such rules to cover are (1) use of the Latin alphabet, without any diacritic marks (which are not used in Latin), (2) capitalisation of the initial letter of the generic name and non-capitalisation of trivial names, (3) a generic or trivial name to consist of more than one letter. If such rules were adopted, Articles 3, 14, 16, and 20 would be discarded, but the substance of the first three of these could be retained in the form of "Recommendations". The latter part of Article 8 and the first clause of Article 13 would similarly be discarded. Simple rules of this kind would remove all problems of spelling and transliteration and of the grammar and etymology of the Latin and Greek languages from the path of the zoologist with no knowledge of, or interest in, the classics, who wishes to form a scientific name. They would also at one sweep almost completely remove the problem of emendation. At the same time, especially if appropriate Recommendations were included in the Code along the lines of the present Articles 3, 14, 16, and 20, such rules would not, at any rate in the foreseeable future, result in any appreciable change in the formation or general appearance of scientific names, because most zoologists would still prefer to use Latin or Latinised names and would form them "correctly". It should be borne in mind that Article 3 already allows names consisting of completely arbitrary combinations of letters and with not the slightest resemblance to Latin or Greek words to be used, at any rate if the generic and specific names are regarded as neuter nouns in apposition. The Code would also allow of the formation of arbitrary names deliberately

constructed so as to differ from Latin words by, say, a single letter, and these would escape emendation even under Mr. Hemming's scheme, provided that the author stated that they were arbitrary combinations of letters. Indeed, in spite of Article 3, it cannot be claimed that in any real sense Latin is the basis of zoological nomenclature, and it is therefore futile to incur all the inconveniences of permitting emendation on the grounds of the mis-spelling or faulty transliteration of Latin or Greek words or on any similar grounds of a philological or etymological nature.

#### (b) Rules for Emendation of Names

Given that the rules for the formation of names are restricted to those indicated under (a) above, the only rules needed to govern emendation are (1) that the original orthography of any name formed in conformity with those rules is to be preserved, and (2) that any name contravening those rules is to be automatically altered to the extent necessary to comply with them, the altered version being ascribed to the original author, dating for purposes of priority from the date of the original publication, and being protected under rule (1) above as though it were the original orthography. A rule such as that proposed by Mr. Hemming would be needed to deal with cases where more than one orthography is employed in the original publication. These rules would dispose of the problem of Article 19, and would subsume Articles 32 and 33.

## (c) "Recommendations"

Recommendations with no mandatory force could be inserted in the Code to deal with all the matters considered important on aesthetic, philological, or traditional grounds by the "classicists". In that form they would not constitute an unjustifiable imposition on non-classical zoologists, and they would raise no question of emendation.

## (d) Closely similar names and Homonymy

A problem related to that of the formation and emendation of names is the problem represented by Article 35, which requires that specific names of the same origin and meaning should be considered homonyms if they are distinguished only by certain specified minor differences of spelling. The words "of the same origin and meaning" give the clue to the motive behind this provision. If its purpose were merely to prevent the possibility of confusion between closely similar names differing, say, by a single letter, the words referred to would not have been included and the scope of the provision would have been greatly extended. Clearly the purpose of the provision is connected with the preoccupation of the classicist with the etymology of zoological names. Otherwise there would be no grounds for regarding "microdon" and "mikrodon" as homonyms, and "microdon" and "macrodon" as distinct. This provision of Article 35 bristles with difficulties, as may be seen from the discussion of it at the time of the Thirteenth International Congress and from a recent proposal of Dr. Muir-Wood (Bull. zool. Nomencl., 6: 90-94). It has

given rise to much confusion and burdened zoologists with much unnecessary work. Yet its retention is not justified by any consideration related to the practical requirements of zoological nomenclature. I therefore propose that it be scrapped as a mandatory provision and that a rule be substituted providing that any difference in spelling between two names shall be evidence of the distinctness of those names for all purposes. The problems of names differing in diacritic marks, as raised by Dr. Muir-Wood (loc. cit.) is disposed of by the provision already proposed that diacritic marks be disallowed in forming scientific names.

The rules proposed in outline under (a) to (d) above would, if acceptable to zoologists, need to be carefully drafted and properly integrated with the rest of the Code. In most cases provision would also need to be made for dealing with names, emendations, and homonymies established before the new rules came into effect. This should not present any great difficulty.

The advantage of the present proposals is that they would enormously simplify many aspects of zoological nomenclature. The International Code is complicated already. Decisions reached by the Thirteenth International Congress, and proposals such as those of Mr. Hemming that have yet to go before Congress, will increase its length and complexity by several times. It is most undesirable that zoologists should be required to occupy their time in the sterile legalistic tasks imposed by provisions of the Code that have no raison d'être in the practical needs of an effective system of zoological nomenclature.

#### (2) Extract from a letter dated 4th September, 1952

Thank you for your letter, reference Z.N.(S.) 356 of 6th August.

It is perfectly true that I did not deal as explicitly as I should have done with the question of emendations already published. I did hint at the provisions that I thought should govern this aspect in the second paragraph on p. 5 of my MS., and again in the second paragraph on p. 8. My attitude is one of full approval for your own proposed solution of the problem, modified as might be necessary to fit in with my proposals. That is, I consider that the guiding principle should be the minimum disturbance of accepted practice, and that provision should therefore be made for the retention of emendations already published which have gained wide acceptance. I do not think that I need to modify my paper to make this clear, but I would be grateful if you would explain my attitude when the matter comes to be discussed at the Fourteenth Congress. I would also like to emphasise the point I have made in the first sentence of para. 2 on p. 8.\*

<sup>\*</sup> The paragraph here referred to is the last paragraph but one of Dr. Key's paper.

By JOSHUA L. BAILY, Jr. (San Diego, California, U.S.A.)

Statement received on 24th June, 1952

Rules should be so simple that anyone can understand them and that everyone will interpret them the same way. They should also be so simple that they can easily be memorized in principle so that it will not be necessary to consult the rule book whenever a decision must be made.

In practice it is quite impossible to foresee all the situations that may arise, and consequently impossible to set up a Code that will provide for all contingencies. Even if this were possible the result would be unsatisfactory, since a Code meeting the requirements of this paragraph would not meet those of the preceding one.

It is clear that many names have been badly constructed and would be improved by emendation. It is also clear that many names have been emended in such a way that the original form is preferable. The most satisfactory way to deal with such situations, regardless of the reason for which the emendation was offered, I believe, will be found to be as follows: First, the original form shall be accorded priority under the rules except in those instances in which the Commission, having decided in favor of the emendation, has placed it on the Official List and has placed the original form on the List of Rejected Names.

This will greatly increase the work of the Commission and delay decisions in many instances; pending a decision on the part of the Commission an author who has suggested an emendation should be allowed to use the same provided that the following requirements are complied with: he should state that the name which he is using is an emendation; he should also cite the original form of the name and the bibliographic reference; and he should state that he has filed an application with the Commission for the confirmation of his emendation.

At the present time the Commission has the authority to suppress one name in favor of another to avoid confusion; but where the choice lies, not between two separate names but between two different forms of the same name, a rule is needed which will vest the power to make the needed decision in the Commission regardless of other considerations.

Such a procedure is simple and adequate, but it will increase the labor of the Commission. This objection could be met by an increase in personnel of the Commission.

Statement of the views of the Scientific Staff of the

# ROYAL ONTARIO MUSEUM OF ZOOLOGY AND PALEONTOLOGY, TORONTO, CANADA

Enclosure to a letter dated 26th June, 1952, from

Dr. F. A. URQUHART, Director

(For the text of the above letter, see Document 1/39)

#### EMENDATION OF NAMES (COMMISSION'S REFERENCE Z.N.(S.)356)

We are in agreement with the summary of compromise suggested for the clarification of the Law of Emendation and for the restriction of the scope of that Law as set forth by you in paragraph 56, page 53 of volume 7, parts 1 and 2.

F. A. URQUHART,

Director, Royal Ontario Museum of Zoology and Palaeontology, University of Toronto.

Statement of the views of the

# COMMITTEE ON NOMENCLATURE OF THE AMERICAN MUSEUM OF NATURAL HISTORY, NEW YORK

(1) Enclosure to a letter dated 10th July, 1952 from Dr. John T. Zimmer, Chairman

(For an extract from the above letter, see Document 1/41 (p. 71))

#### Z.N.(S.)356. EMENDATION OF ZOOLOGICAL NAMES

We believe that a complicated system of emendations under all sorts of conditions would be utterly unworkable. Under the original Article 19, Opinion 4, for example, disallowed an error of classical transcription because the origin of the name was not stated in the original account. This should give a clue to the intent of the original Article and the various proposals to make a variety of changes because of errors of this sort are certain to produce confusion. We believe Article 19 should be preserved intact with clarification by a statement that errors which can be corrected must be evidenced in the original publication. Classical derivations or other origins are not to be taken for granted but must be cited originally to give any basis for changes. Allowable emendations should be considered as full homonyms of the erroneous terms regardless of the extent of difference in spelling.

A.M.N.H. Committee on Nomenclature

(Signed) EDWIN H. COLBERT
JOHN T. NICHOLS
ERNST MAYR
GEORGE H. H. TATE
JOHN T. ZIMMER (Chairman)

## (2) Extract from a letter dated 6th August, 1952

This brings me to the subject matter of your other letter, concerning emendations. Our Committee deliberately intended to consider as untenable all emendations that were not valid corrections based on evidence in the original accounts. There have been from early times various individuals who took it upon themselves to emend original spellings because of faulty Latin or Greek construction when, for all they knew, the original author preferred the style he had used regardless of its inaccuracy. Fortunately in Ornithology, there appear always to have been enough individuals of the opposite mind who promptly reverted to the original usage and maintained it; at least there was

an early trend toward rejection of the emendations, and established usage is that of the original. If there are cases in other groups where the emendations have been standardised for a long period and there was any sort of confusion entailed in using the original spelling, such names might be taken up by the Commission under its plenary powers; otherwise I see no reason to continue to reject the originals. If you let down the bars on emendations or place them under elaborate provisions, the result would be most confusing. We are against them.

Statement submitted on behalf of the

#### NOMENCLATURE DISCUSSION GROUP, WASHINGTON, D.C.

Enclosure to a letter, dated 16th July, 1952 from Dr. R. E. BLACKWELDER, Secretary

# ARTICLE 19 AND THE SUBJECT OF ERRORS AND EMENDATIONS (Z.N.(S.)356)

A committee of the Nomenclature Discussion Group of Washington studied Articles 19 and 20 and relevant *Opinions*, published a tentative proposal in order to solicit comments, and later revised the proposal (*Science* 106: 315–316, Oct. 3, 1947; *ibid.* 108: 37–38, July 9, 1948). It was intended to submit this proposal to the International Commission before the Paris Congress, but we apparently neglected to do so in the rush of other business. As a result, the Secretary's report on the subject of Article 19 (*Bull. zool. Nomencl.* 7: 1–60, 1952) referred frequently to the 1947 version, but not to the later and revised one.\*

After studying the Secretary's report and restudying our own proposal and the points of difference, we have decided to submit our proposal (with certain revisions) to the Commission, first as a formal substitute proposal in its own right, and secondly as a comment on the various points of the Secretary's proposal. The latter actually agrees with our views in many respects, and the new revisions will also meet some of his criticisms. Our original proposal dealt with both Articles 19 and 20, and we still believe that they should be considered together, but in order to confine the proposal to the field covered by the Secretary's report, we herewith submit only the proposal concerning Article 19 (—Article 20 our revised proposal of 1948). Two copies of the revised proposal are submitted herewith.

In addition to the reactions stated or implied by submission of our proposal (e.g., mandatory correction of the misuse of connective letters is obviously opposed by the wording of Section I, paragraph 1), we wish to record the following:

- (a) Approval of the Secretary's proposal that all emendations formally approved by the Commission's decisions in past Opinions be declared res adjudicata and fixed, without prejudice to any future plan;
- (b) Opposition to treating emendations in different ways depending on their date of proposal before or after a revised scheme, because any such plan would be too complex and might involve the Commission in too many cases;

<sup>\*</sup> See Annexe 2.

(c) Approval of plans to include in the Code schedules for transliteration from the Cyrillic and classical Greek alphabets, and for the use of connective letters, PROVIDED HOWEVER that these schedules be strongly recommended BUT NOT MANDATORY (and therefore infringements, whether by intent or ignorance, would not be emendable).

Annexe 1 to Statement furnished by the Nomenclature Discussion Group

# A REVISED PROPOSAL FOR ERRORS AND EMENDATIONS IN THE RULES OF ZOOLOGICAL NOMENCLATURE

[Further revised June, 1952]

#### Article 19

- (I) Original Spellings. The original orthography of a name is to be preserved unless it can be demonstrated by evidence in the original publication itself that there has occurred an inadvertent error, such as a lapsus or a copyist's or printer's error. The following are not to be construed as errors: incorrect transliteration, misuse of connective letters, and differences between the source and the name resulting from the application of Article 20.
  - (a) When demonstrable in the original publication, such inadvertent errors in original spelling are correctable and are to be treated as if corrected wherever they occur; the corrected spellings are justified emendations and take the place of the original (erroneous) spellings in all respects, including date and authorship. The erroneous spellings, have no separate status in nomenclature, do not preoccupy, are not available as replacement names, and never acquire validity by citation in synonymy.
  - (b) If an original spelling is suspected or claimed to be erroneous, but there is no proof of error in the original publication itself, the original spelling is not subject to change, even by the original author.
  - (c) If, in the original publication of a name, two or more spellings are used, without compelling evidence as to which is in error, the spelling employed by the first subsequent writer is to be adopted.
- (II) Subsequent Spellings. In subsequent publications variant spellings may occur either through intention or misadventure. For the purpose of this section emendations are defined as changes that are originally stated to be intentional; erroneous subsequent spellings are any changes that are not emendations, including those of doubtful status which cannot be demonstrated from their publication to be emendations.

Subsequent variant spellings are:

(a) Emendations that are justified under Section I above (see I(a)) (valid emendations); or

- (b) Emendations that are not justified under Section I above (invalid emendations). Such emendations have status as separately validated names with their own date and author; they are junior objective synonyms of the name in its original form; they are available as replacement names; they preoccupy any later names of the same spellings; and their authors are those who proposed them as emendations; or
- (c) Erroneous subsequent spellings, as defined above. These are correctable and are to be treated as if corrected wherever they occur. They have no separate status in nomenclature, do not preoccupy, are not available as replacement names, and never acquire validity by citation in synonymy.

Example. The generic name Oxytelus (Coleoptera) has been written erroneously as Cxytelus, Oxytelus, Oxytelus, Oxitelus, Oxytelus, Oxytelus, Oxytelus, Oxytelus, Oxytelus, Oxytelus, Oxytelus, and Oyxtelus. These are all to be corrected and have no separate status.

Example. In 1833 Germer (Rev. Ent. 1: 175) published the name Dictyophara (Homoptera). Among the numerous variant spellings of this name that have occurred is the lapsus Dictyonota of de Seabra 1930 (Arq. Secc. Biol. Par. 1: 347). This lapsus may have been caused by association with Dictyonota Curtis (Hemiptera), with which insect it could not have been confused. The error is to be corrected and has no separate status in nomenclature. Or,

- (d) Omission or addition of diacritic marks or the substitution for them of standard letters. Wherever these occur, they are not to be treated either as erroneous subsequent spellings or as emendations, but as permissible variations. As in Article 20, elimination of diacritic marks is recommended. Or,
- (e) Translation of a numerical prefix into an Arabic numeral, or conversely, writing out a number in Latin characters. These are permissible variations, and the two forms are in every way coordinate. Either form pre-occupies the other as well.

Example. Sexmaculatus may be written 6-maculatus; 16-punctatus may be written sedecempunctatus or sedecem-punctatus.

Annexe 2 to statement furnished by the Nomenclature Discussion Group

PAPER ENTITLED "A REVISED PROPOSAL FOR ERRORS AND EMENDATIONS IN THE RULES OF ZOOLOGICAL NOMENCLATURE"
PREPARED IN 1948 BY A SUB-COMMITTEE OF THE SMITHSONIAN INSTITUTION COMMITTEE ON ZOOLOGICAL NOMENCLATURE

(Published on 9th July, 1948, in Science 108 (No. 2793): 37-38.)

Suggestions for changes in Articles 19 and 20 of the International Rules, dealing with the formation and spelling of scientific names, was published in *Science* (3rd October, 1947, pp. 315–316) by a sub-committee of the Smithsonian Institution Committee on Zoological Nomenclature.

Comments sent in by readers have resulted in reconsideration of many points and in reorganisation of the proposal in order to eliminate ambiguities and clarify points which had been misunderstood. The revised version is presented as the formal proposal of the Smithsonian Committee. It has been sent to the International Commission in the form of a suggested amendment to the Rules, in order that the Commission might begin consideration of it at the Paris Congress.

Taxonomists are urged to write direct to the Commission, stating their views on these questions either with reference to this proposal or not.

As before, the wording of these proposals has been very carefully studied. Unless otherwise defined, the words must be taken literally in their customary sense and be interpreted strictly. It may be well to emphasize that Article 19 (Revised) deals with the problem of deciding on the spelling of new names before their proposal; Article 20.I. (Revised), with the spelling of a name as first published and the possibility of making subsequent changes in the spelling; and Article 20.II. (Revised), with subsequent spelling variations as such. The two articles have been reversed in position and number because of the obvious inherent sequence from formation through original publication to subsequent re-use.

Names using numerals (2-punctatus, 16-maculata) or letter symbols (S-scriptus, M-litterus) may be held to be invalid under the present Rules, and the subcommittee is inclined to this view. However, the existence in the literature of certain groups of animals of a very considerable number of these names, including many that date from the 10th edition of Linné, seems to make it impracticable to rule them out. We therefore suggest special provision for them as an exception to the general rule that only Latin characters may be used.

Formation and Orthography of Zoological Names.

Article 19.

In forming new names, only Latin letters are to be used, regardless of the characters used in quoting the source from which the name is derived. The Latin letters in this sense are those of the classical Latin alphabet and the Neo-Latin, k, j, and w.

The use of diacritic marks (such as ö, ñ, ø, č and å) in forming names is optional, regardless of use in the source as quoted.

Recommendation: It is strongly recommended that, in forming new names, any diacritic marks be omitted or replaced by standard substitute letters (such as ue for the Germanic ii and as for the Scandinavian å), as the use of diacritic marks by subsequent workers may be impracticable because of differences in type fonts.

Example. If an author desires to dedicate a genus to the Swedish scientist, Stål, and a species to the Czech scientist, Kříž, he should employ such simple forms as Stalia (or Staalia) and krizi The forms Stålia and kříži. are not recommended but are not to be rejected on this account.

Example. A name dedicated to Müller may be written Mulleria, Muelleria, or Mülleria at the author's choice or as circumstances dictate. (Note: This requires that Article 35,a and Opinion 147,1,a be amended to include words differing only in the use of ue and u, as and a, or discritic marks.

Names could be formed with a numerical prefix. The prefix should be the combining form of the Latin word for the cardinal number, written in Latin letters, but if written with an Arabic numeral, the name is not to be rejected on that account.

Example. A ten-spotted animal may be named X-us decim-maculatus. The use of X-us 10-maculatus is permissible but not recommended.

The use of a symbol prefix to show the shape of a marking or structure is not recommended, but, if the symbol is in the form of a Latin letter, such names are not to be rejected.

Example. Letter symbols such as V-nigrum, X-maculatus, and C-luteum are permissible, but 1-signatus,  $\infty$ -maculata, ?-notata, and  $\Delta$ -album are not acceptable and have no status under the Code.

#### Article 20.

- (I) Original Spellings.—The original orthography of a name is to be preserved unless it can be demonstrated by evidence in the original publication itself that there has occurred an inadvertent error, such as a lapsus or a copyist's or printer's error. The following are not to be construed as errors: incorrect transliteration, misuse of connective letters, and differences between the source and the name resulting from the application of Article 20. [See Opinions 8, 26, 36, 60, and 70.]
  - (a) When demonstrable in the original publication, such inadvertent errors in original spelling are correctable and are to be treated as if corrected wherever they occur; the corrected spellings are justified emendations and take the place of the original (erroneous) spellings in all respects, including date and authorship. The erroneous spellings have no status in nomenclature, do not preoccupy, are not available as replacement names, and never acquire validity by citation in synonymy. [See Opinion 26.]
  - (b) If an original spelling is suspected or claimed to be erroneous, but there is no proof of error in the original publication itself, the original spelling is not subject to change, even by the original author. [See Opinion 34.]
  - (c) If, in the original publication of a name, two or more spellings are used, without compelling evidence as to which is in error, the spelling employed by the first subsequent writer is to be adopted.
- (II) Subsequent Spellings.—In subsequent publications variant spellings may occur either through intention or misadventure. For the purpose of this section emendations are defined as changes that are originally stated to be intentional; erroneous subsequent spellings are any changes that are not

emendations, including those of doubtful status which cannot be demonstrated from their publication to be emendations.

Subsequent variant spellings are:

- (a) Emendations that are justified under Section I above see I (a)) (Valid Emendations); or
- (b) Emendations that are not justified under Section I above (Invalid Emendations). Such emendations have status as separately validated names with their own date and author; they are junior objective synonyms of the name in its original form; they are available as replacement names; they preoccupy any later names of the same spellings; and their authors are those who proposed them as emendations. [See Opinions 34, 120, 125, and 148 (with supplementary note).]; or
- (c) Erroneous Subsequent Spellings, as defined above. These are correctable and are to be treated as if corrected wherever they occur. They have no separate status in nomenclature, do not preoccupy, are not available as replacement names, and never acquire validity by citation in synonymy. [See Opinion 29.]

Example. The generic name Oxytelus (Coleoptera) has been written erroneously as Cxytelus, Otytelus, Oxytelus, Oxitelus, Oxyteles, Oxytelus, Oxytelus, Oxytelus, Oxytelus, Oxytelus, Oxytelus, Oxytelus, These are all to be corrected and have no separate status.

Example. In 1833 Germar (Rev. Entomol., 1, 175) published the name Dictyophara (Homoptera). Among the numerous variant spellings of this name that have occurred is the lapsus Dictyonota of de Seabra 1930 (Arq. Secc. Biol. Par., 1, 347). This lapsus may have been caused by association with Dictyonota Curtis (Hemiptera), with which insect it could not have been confused. The error is to be corrected and has no separate status in nomenclature. Or,

- (d) Omission or addition of diacritic marks or the substitution for them of standard letters. Wherever these occur, they are not to be treated either as erroneous subsequent spellings or as emendations but as permissible variations. As in Article 20, elimination of diacritic marks is recommended. Or,
- (e) Translation of a numerical prefix into an Arabic numeral, or conversely, writing out a number in Latin characters. These are permissible variations, and the two forms are in every way coordinate. Either form preoccupies the other as well.

Example. Sexmaculatus may be written 6-maculatus; 16-punctatus may be written sedecempunctatus or sedecem-punctatus.

RICHARD E. BLACKWELDER, J. BROOKES KNIGHT, CURTIS W. SABROSKY

#### By E. RAYMOND HALL

(University of Kansas, Department of Zoology, Lawrence, Kansas, U.S.A.)

Enclosure to a letter dated 22nd July, 1952

Operate on Classical grounds.

#### DOCUMENT 5/32

Statement submitted on behalf of the

### NOMENCLATURE COMMITTEE OF THE SOCIETY OF SYSTEMATIC ZOOLOGY

Letter, dated 24th July, 1952, with enclosures, from Mr. W. I. FOLLETT, Chairman.

#### EMENDATIONS; Z.N.(S.)356

The Nomenclature Committee of the Society of Systematic Zoology recommends the adoption of a primary rule on the subject of emendations, to read as follows:

"The original orthography of a name is to be preserved unless it can be demonstrated in the original publication itself that there has occurred an inadvertent error, such as a lapsus or a copyist's or printer's error."

This is the basic portion of the rule suggested by Blackwelder, Knight, and Sabrosky\*. The complete text of their proposal has been published (Science Vol. 108, No. 2793, July 9, 1948: pages 37–38) and is therefore not repeated here.

Since the views of the various members of the committee may prove helpful to you, a copy of each of the following is enclosed herewith, in duplicate:

- (1) Report entitled "The Emendation of Zoological Names", by Curtis W. Sabrosky (Appendix 1);
- (2) Comments received from each member of the committee, on the subject of emendations (Appendix 2).

Further discussion of this subject by two members of this committee (and by other members of the society) is submitted by way of the minutes of a Symposium recently conducted by the Pacific Section of the society. Only that portion of these minutes which deals with emendations is enclosed. A copy of my paper, entitled "Emendation of Zoological Names", which formed the basis of this discussion, is also enclosed, as well as a copy of Mr. Sabrosky's letter of July 8, 1952, commenting upon that paper.

The material mentioned in the preceding paragraph of this letter does not constitute a part of the committee's report but is submitted by way of a supplement thereto (Appendix 3).

<sup>\*</sup> See Document 5/30.

#### APPENDIX 1 TO MR. FOLLETT'S LETTER OF 24TH JULY, 1952

#### THE EMENDATION OF ZOOLOGICAL NAMES

#### By CURTIS W. SABROSKY

Secretary Hemming's report on this subject appeared under the Commission's reference number Z.N.(S.)356 in the Bull. zool. Nomencl. 7 (pts. 1/2): 1–60, Feb. 25, 1952. For this unusually long report, there is a summary (pp. 52—59), and the Committee members are referred to that for the general outlines of his proposal. It may also be noted that the proposal deals only with Article 19, for it was decided at the Paris Congress that names incorrectly formed under Articles 14–15, 18 and 20 are to be automatically corrected and do not fall within the province of Article 19.

This is an exceedingly difficult and complex subject and report, but I suspect that there is no need to go into much detail on the various points. Most zoologists will have strong reactions on certain fundamental propositions, and these may determine their approval or disapproval of any given plan.

In general, there are three possible solutions to the problem:

- (a) The classical approach;
- (b) The objective approach (perhaps "objective" is not a happy choice, but it will do for the moment): Acceptance of the name as published, except for allowing correction of what may be called mechanical errors, i.e., inadvertent errors demonstrable in the original publication, notably inconsistencies between name and text or stated source. The approach is not really "anti-classical", but a practical approach that can be applied by any taxonomist whether or not he has mastered the classical languages, which most have not;
- (c) A compromise plan, using parts of both of the above.

The first approach, at least in the ultra-classical sense, does not seem practical and reasonable at present, and is becoming less so, as the Secretary clearly points out. The choice thus lies between the last two. The Secretary's proposal is a compromise plan as contrasted with the objective-type proposal by Blackwelder, Knight and Sabrosky (Science 108: 37–38, July 9, 1948). The latter is hereinafter referred to for brevity as the BKS proposal. It seems advantageous to make this memo a comparative consideration of the two proposals, rather than merely an analysis of the Secretary's report, because both are complete proposals bearing on the subject, and also because the latter method would have required, in my view, some counter-proposals that were already available in concise form in the BKS proposal. (Note: The Secretary refers in his report to the 1947 version by the BKS sub-committee, but the revised version (1948) was the one intended for the Commission's consideration, and is the one referred to in the following memo.\*)

<sup>\*</sup> The document here referred to forms Annexe 2 to the statement furnished by the Nomenclature Discussion Group, Washington, D.C. (Document 5/30, Annexe 2).

The Secretary is fully aware of the trend of the times away from classical knowledge on the part of zoologists, and an increasing impatience with etymological and philological niceties and technicalities, a trend that bids fair to become universal in future generations. Partly for these reasons, and partly to attain greater objectivity, the Secretary is proposing rules that go far in the direction of the BKS suggestions. At the same time, there is a conscious effort to gain support from the classicists by allowing certain emendations. The compromise suggestions, though complex and unwieldy, might work as far as the procedures are concerned; whether they should be adopted, on grounds of principle or practicality, is another matter.

A general criticism is that the report contains frequent references to the possibility, not mentioned in the BKS proposal, of application to the International Commission. As indicated in my memo on family names, I believe that the right to apply for use of the plenary power in exceptionally awkward, confusing, or complicated cases underlies the entire Code, and can be stated clearly in one place, without frequent repetitions which greatly complicate and lengthen the discussion and the proposed rules.

A second general criticism, as in the report on family names, is that the proposal places too much detail and too many decisions in the hands of the Commission. This might not be too serious if the proposed rules were strict and subject to suspension only at rare intervals. But when the proposals contain loopholes to satisfy various groups of zoologists, the glut of business of the Commission could be appalling. If the Commission undertakes to pass on so many cases of emendations, neotypes, family and related names, etc., besides the flood of requests for ordinary nomina conservanda, we may as well say goodbye to efficiency, clarity and simplicity in nomenclature.

It was particularly to take a step in the direction of these last considerations that the BKS sub-committee, after much study and discussion, finally arrived at their published proposal. Their study had, in fact, almost convinced them in the end that the best rule to achieve stability and to avoid endless bickering would be this simple, clear, easily applied and absolutely objective rule: "The original spelling of a scientific name is to be accepted." Even this simple rule needs a few corollaries, however, such as the treatment of alternate spellings (some of them certainly errors) which appear in the same work. And it seemed necessary to provide for correcting the obvious monstrosities that sometimes arise from printer's errors. And so one thing led to another, and finally to the proposal as last drafted (1948), though that was kept as simple and as direct as possible. It may be appropriate to mention here also that the most important and most widely recognised Code in a group of animals whose nomenclature is probably the most stable, the ACU Code for ornithology, adheres to the original spelling except for typographical errors.

The attention of the Committee is also directed to some pertinent and well-phrased remarks by G. Winston Sinclair (1951, Amer. Midland Nat. 46: 252-254), who argues for the retention of the original spelling in most cases.

As a general conclusion, from the practical standpoints of stability, uniformity and objectivity, and the desire to achieve a maximum of automatic nomenclature and a minimum of legalistic procedures. I am personally far more impressed by the arguments of those who are opposed to emendations than by those who favour them. By allowing emendations, we have furthered confusion, with errors in citation, differences of opinion, and variance in practice. As Sinclair (1951) well remarks, the original name "cannot be legislated into non-existence".

#### Recommendations

I recommend the following for the Committee's consideration as its recommendation to be passed on to the International Commission:

- (1) As a first step in the whole problem, it is recommended that we approve the Secretary's proposals (paragraphs 49, 50) that emendations approved by the Commission in past *Opinions* be declared *res adjudicata* and be fixed, without prejudice to any future plan and without establishing precedent for any principle. Presumably these *Opinions* established usage in the cases covered, and no good would be accomplished by reversing them.
- (2) It is recommended that Article 20 (Old Code) be revised concomitantly with Article 19, as was done in the BKS proposal, because certain matters (diacritic marks, numerals, odd letters) are inevitably involved in the problems of both original and subsequent spellings. Article 20 is referred to briefly in paragraph 3 of the Secretary's report on Emendations. Some points have been treated elsewhere (e.g., Bull. zool. Nomencl. 4, pts. 7/9, pp. 198–200, 25th May, 1950, on actions of the Paris Congress), but not in direct relation to Article 19.
- (3) It is recommended that the Code contain strongly recommended (but not mandatory) schedules for transliteration from the classical Greek and Cyrillic alphabets, and schedules or suggestions for the formation of names, endings, use of connective letters, criteria for determining the stem of Greek and Latin nouns and any other similar aids to the taxonomists. This is in line with a ruling of the Paris Congress (cf. paragraph 23 of the report on Emendations).
- (4) It is recommended that the final proposal on emendations treat all names on the same basis, regardless of date. The varying treatments outlined by the Secretary for names or emendations before and after the effective date of the plan add a great deal to its complexity, and would contribute much to swamping the Commission with work in the future. In most cases, emendations show little difference in spelling and give rise to little or no confusion. In critical cases, or in cases affecting a whole class of emendation which would involve many names (e.g., the "my" stem that is a problem in names in malacology, mammology and Diptera), an application, suitably supported by evidence, could always be made to the Commission.
- (5) Finally, and most important, it is suggested that the Committee recommend the 1948 proposal by BKS, with some alterations as noted below, as a substitute for the Hemming Proposal.

Note: This recommendation is not to be construed as a blanket condemnation of the Secretary's proposal, which actually agrees with and makes use of many of the BKS conclusions on status and definition. Rather, and unlike my paragraph by paragraph recommendations for family names, it seems most practical in this problem to recommend the complete substitute proposal which is available, and then to point out the resemblances and differences.

#### Comments on BKS and Hemming Proposals

(arranged in order of BKS proposal)

#### General Notes:

Number: The Article will be referred to here as number 19. BKS(1948) reversed the numbering of Articles 19 and 20, on the grounds of more logical order, but I can see advantages to retaining the original number as a matter of convenience and continuity. I wish that it could be done throughout in revising the Code.

Titles: It is believed that the reader would be aided by insertion of titles for the two sections of the Article, viz.,

- (a) Section I (Original Spellings),
- (b) Section II (Subsequent Spellings).

Names of Categories: Certain changes in terminology (but not including definitions) suggested by Secretary Hemming are distinct improvements, as noted under several paragraphs below. It is suggested that the BKS proposal be modified accordingly. The names of the categories may be outlined as follows:

(a) Original Spellings.

Valid Original Spellings. Erroneous Original Spellings.

(b) Subsequent Spellings.

Emendations:

Valid Emendations. Invalid Emendations.

Erroneous Subsequent Spellings (see discussion below).

Article 19 (" Article 20 " of BKS 1948)

Section (I) Original Spellings : The basic points of controversy lie in the first paragraph.

(x) The BKS proposal would allow emendations, even by the original author himself, only when madvertent errors "can be demonstrated in the original publication itself." Secretary Hemming agrees with the general purpose but believes the rule should be more objective, and he would limit automatic emendation to cases where the original author (or his editor) corrects the mistake in the same volume, or within twelve months. It was BKS's intention, in using

the above quoted statement, to make the basis for emendation as objective as possible by allowing emendations only when the evidence of error appeared in the original publication itself, without recourse to esoteric information, or private or special knowledge. Another point: Secretary Hemming (par. 37) regards it as "absolutely illogical and pointless" to include printer's errors as a separate category in Article 19, because they are only one form of "faute d'orthographe". In the BKS proposal (1948), the expression is not used as a category but as an example of the mechanical or inadvertent errors that are emendable when they can be demonstrated in the original publication (i.e., when it can be demonstrated that some error is present; it is not always possible to say what kind of error it is).

- (xx) Under the BKS proposal, incorrect transliteration is not to be construed as an emendable error. In the Hemming proposal, it is in certain types of cases. Two points on the latter proposal: If the trend away from classical knowledge has gone as far and as fast as the Secretary believes, it seems unnecessary now (and will become more so) to make the suggested exceptions; secondly, the exceptions and the varying treatments add complexity (cf. my fourth recommendation).
- (xxx) Misuse of connective letters is also not construed as an emendable error in the BKS proposal. The Hemming proposal does not include this in the subject of emendations and Article 19, but considers it as an allied problem (cf. par. 53, 54) to be the subject of a separate Article. I recommend that (1) we express opposition to mandatory articles on the subjects covered in paragraphs 53 and 54, (2) that we recommend that those subjects be included with strong Recommendations in the various schedules which are listed above in my third recommendation, and (3) that infringements of those schedules be not construed as original spelling errors.
- Section (I) (a): Essentially the same in both proposals, but the "no status" provision appears in greater detail in the BKS proposal.

Section (I) (b): Involved in point (x) under Section I above.

Section (I) (c): Essentially the same in both proposals (par. 52).

Section (II) Subsequent Spellings: The two definitions (of "emendations" and "errors") in the first or general paragraphs are like those of the Hemming

proposal except in two points:

(x) Emendations are defined by BKS as "changes that are originally stated to be intentional, or are demonstrably so"; the Hemming proposal would limit them to the changes with stated intention. Perhaps the "demonstrably so" provision is not generally understood, and may be impossible to interpret objectively, and if so it is weak. It was intended to cover such works (probably few in number) as Agassiz, in which there is no specific statement of intention with each emended name but in which the author is well known to have emended extensively and intentionally. It seems best to abandon the "demonstrably so" provision, and to provide in some other manner for such known works that have historically been considered to contain emendations.

(xx) Secretary Hemming's point that the term "error" is too broad in scope seems to me to have general merit. It is true that the BKS proposal said "For the purpose of this section, errors are . . . ", and that was clear enough in its context. But in other discussions, involving both original and subsequent spellings, it would be useful to have distinctive terms for the various kinds of error. Accordingly, I suggest the acceptance of the Secretary's idea that another term is desirable, but I recommend changing his term "erroneous spelling change" to "erroneous subsequent spelling". The latter term will thus be directly comparable to the term "erroneous original spelling", and it would avoid the connotation of intent that "change" might have in some sentences.

Section (II) (a), (b), and (c): The names of the categories should be modified as suggested above in the general notes. The definitions and status of these three categories of the BKS proposal are virtually the same as those of the Hemming proposal. Secretary Hemming does not seem to mention the question of whether errors can acquire validity by citation in synonymy; this point, which is small, but should be covered, is disposed of in the BKS proposal.

Section II, (c) and (d): Not clearly covered in the Hemming proposal (though cf. references under my second recommendation), but I believe that they should be, and that they should be considered in connection with Article 20.

# APPENDIX 2 TO MR. FOLLETT'S LETTER OF 24TH JULY, 1952 COMMENTS RECEIVED BY THE CHAIRMAN FROM MEMBERS OF THE NOMENCLATURE COMMITTEE OF THE SOCIETY OF SYSTEMATIC ZOOLOGY

#### Enclosure 1 to Appendix 2

Comment by Professor CHARLES D. MICHENER

I favour the "BKS" proposal. We are flying in the face of an obvious trend if we insist on too much classical knowledge.

Enclosure 2 to Appendix 2

Comment by Dr. ROBERT R. MILLER

(Extract from a letter dated 15th July, 1952)

The more I consider this problem of emendation the more I become convinced that the only simple and practical way out is to accept the original spelling. I would modify this by saying that if it is clear-cut in the original

paper that a typographical error has been committed then emendation is in order. I feel this way even though this concept would include the spelling "Ichthyacus breederi" despite the fact that ichthyologists of the United States, at least, are well aware that the New York ichthyologist spells his name Breder. From the original publication there is no indication that an error has been committed. My final acceptance of this concept comes after reading the complicated, unwieldy, and impractical proposals suggested by Hemming and the knowledge that, if such proposals are adopted, I will be spending the rest of my systematic life submitting petitions to the International Commission for action. I definitely am against the trend away from "automatic" nomenclature.

I agree entirely with you that objectivity should outweigh all other considerations in attacking nomenclatorial problems.

#### Enclosure 3 to Appendix 2

Comments by Mr. CURTIS W. SABROSKY

(Extract from a letter dated 9th June, 1952)

My recommendations on emendations will constitute my comments for the committees on that subject. I may add, however, that in my fifth recommendation it should probably have been made clear that the proposed substitution was for Article 19 only ("Article 20" of BKS proposal). The Secretary's report dealt with that, and we should not allow consideration of Article 20 (old Code) to interfere with our study of Article 19 proper. My second recommendation and paragraphs (d) and (e) of Section II of BKS proposal can still stand as they are, however.

#### Enclosure 4 to Appendix 2

Comment by Professor HENRY TOWNES

(Extract from a letter dated 20th May, 1952)

(1) I allow no emendations. No other system is "clear-cut".

#### Enclosure 5 to Appendix 2

Comment by Professor JOHN W. WELLS

(Extract from a letter dated 11th June, 1952)

#### A. EMENDATION OF ZOOLOGICAL NAMES

I agree with Sabrosky's recommendations completely, and emphasize that it should be made as difficult as possible, if not downright impossible, to emend names in any way for any reason.

#### Enclosure 6 to Appendix 2

#### Comments by Dr. JOHN T. ZIMMER

356. I disapprove of all the elaborate rules proposed. I believe Article 19 should be preserved intact with a clarifying statement to the effect that mechanical errors that can be corrected (not obligatory) must be evidenced in the original publication. Classical derivations and the like, unless definitely stated, are not to be taken for granted. Allowable emendations are to be full homonyms of the erroneous terms.

## APPENDIX 3 TO MR. FOLLETT'S LETTER OF 24TH JULY 1952 DISCUSSION IN CONNECTION WITH A SYMPOSIUM ON ZOOLOGICAL NOMENCLATURE ORGANISED IN JULY 1952 BY THE PACIFIC SECTION OF THE SOCIETY OF SYSTEMATIC ZOOLOGY

#### Enclosure 1 to Appendix 3

PAPER BY MR. W. I. FOLLETT SUBMITTED TO THE SYMPOSIUM ON ZOOLOGICAL NOMENCLATURE HELD BY THE PACIFIC SECTION OF THE SOCIETY OF SYSTEMATIC ZOOLOGY ON 20TH JUNE, 1952

#### EMENDATION OF ZOOLOGICAL NAMES

#### By W. I. FOLLETT

In an article entitled "The Emendation of Zoological Names: an Appeal to Zoologists for Advice" published by Mr. Francis Hemming in *Bull. zool. Nomencl.* 7: 4-60, dated February 25, 1952, the problem of emendation is set forth with great particularity. It may be summarised as follows:

Article 19 of the International Rules of Zoological Nomenclature, enacted at the Berlin Congress of 1901, provided that "The original orthography of a name is to be preserved unless an error of transcription, a lapsus calami, or a typographical error is evident." [Cf. Proc. biol. Soc. Wash., 39, 1926: 80.] This provision has received extremely diverse interpretation.

It is proposed to substitute a provision based upon strictly objective criteria. Such a provision should recognise the recent decline of classical training among zoologists. It should be a compromise scheme, in order to please as many workers as possible. The following scheme is suggested, and its criticism by specialists is requested:

#### **D**efinitions

*Emendations*. Any change in the spelling of a previously published scientific name, which the author of that spelling change makes clear is intentional (p. 21, par 17).

Erroneous spelling changes. Any change in the spelling of a previously published scientific name, other than an emendation (p. 21 par. 17).

A name that constitutes an "erroneous spelling change" shall possess no status in nomenclature; shall not be available as a replacement name; and shall not preoccupy any later use of the name (p. 23, par. 20).

This rule is subject to the proviso that the International Commission may declare valid a name that constitutes an "erroneous spelling change" (pp. 23–24, par. 21).

Valid emendations. An emendation made in accordance with any of the methods prescribed for the emending of names (p. 21, par. 18).

A name that constitutes a "valid emendation" shall replace the original spelling; shall rank for priority from the date on which the name was originally published in an incorrect form; and shall be attributed to the original author (pp. 21–22, par. 19).

Invalid emendations. Any emendation, other than a valid emendation (p. 21, par. 18).

A name that constitutes an "invalid emendation" shall rank as a separately published name; shall rank for priority from the date on which it was published; shall be attributed to the author by whom it was published; shall be available as a replacement name if sufficiently distinct that it is not a homonym; and shall render invalid, as a junior homonym, any later use of that name (pp. 21–22, par. 19).

Erroneous original spellings. The original spelling of a scientific name, when that spelling is later rejected in favour of a valid emendation (p. 21, par. 18).

A name that constitutes an "erroneous original spelling" shall possess no status in nomenclature (pp. 21-23, par. 19).

Error of transliterations. Any spelling mistake due to the adoption of an erroneous method of transliterating a word into the Latin alphabet from some other alphabet (p. 47, par. 47).

Spelling mistakes. Any erroneous spelling, other than an error of transliteration (p. 47, par. 47).

#### The Basic Rule

The original spelling of a scientific name is to be maintained, except as follows (p. 47, par. 48):

- (1) In a name published after a designated date, a transliteration at variance with rules then in existence shall be corrected by subsequent authors. This exception does not apply to names of persons or places (p. 32, par. 29).
- (2) A spelling mistake may be corrected in a note or corrigendum published within 12 months, in the same volume, subject to review by the International Commission. This exception does not apply to errors of transliteration nor to names of persons or places (cf. p. 36, lines 1-3) (pp. 34-36, pars. 32-33).
- (3) An error of transliteration or spelling mistake in the name of a person, deity, or place of ancient Greece or Rome shall be corrected by subsequent authors (p. 40–41, par. 39, Greek personage; pp. 41–42, par. 41, Greek place; p. 41, par. 40, Roman personage; p. 42, par. 42, Roman place).

If there is disagreement as to whether a name falls within one of these categories, the problem of its emendation shall be determined by the International Commission (pp. 42-43, par. 43).

These are the only exceptions. Any other kind of emendation may be made only by the International Commission. Specifically mentioned in this regard are emendations of the following:

- (1) Errors of transliteration, published before a designated date. However, it is recommended that such an emendation, in current use, should not be abandoned pending the Commission's decision (pp. 28–29, par. 26).
- (2) Errors of transliteration in names published before a designated date but not emended before that date (pp. 30–32, pars. 27–28).
- (3) A spelling mistake in a name published after a designated date (pp. 38–39, par. 36).
- (4) An error in a modern place-name, irrespective of its date of publication, and despite any corrigendum published in the same volume (pp. 43-44, par. 44).

Furthermore, where emendations of spelling mistakes not subject to automatic correction were published before a designated date, such emendations shall be subject to review by the International Commission. However, it is recommended that such an emendation, in current use, should not be abandoned pending the Commission's decision (pp. 36-37, par. 35).

The temporary rule permitting automatic emendation of spelling mistakes based upon misreading of a label or register, should be reversed, and such emendation should be made only by the International Commission. This was the problem of *Leuciscus hakuensis*, based upon a misreading of the words "Lake Hakone" on a label, as discussed in *Bull. zool. Nomencl.* 4, 1950: 143 (pp. 44–45, par. 45).

#### **Supplemental Suggestions**

In determining the proper spelling of a name as used for one taxonomic unit, the International Commission may, at the same time, determine the proper spelling of that name as used for other taxonomic units (pp. 45-46, par. 46).

Emendations recorded in the Commission's Opinions and Official Lists shall be maintained (pp. 48-49, par. 49).

Rules establishing the connective vowel to be employed in forming compound trivial names, and rules regarding the use of the letter "i" before the termination "-ensis," are to be considered separately from the subject of emendation (pp. 50-51, pars. 53-54).

#### Discussion of Suggested Scheme

The exceptions requiring the automatic emendation of names of personages and places in ancient Greece and Rome were avowedly made as a concession to zoologists trained in the classical languages (p. 41, par. 39). The advisability of maintaining these exceptions appears extremely doubtful. They are capable of involving serious uncertainties, such as (1) the dates of the beginning and ending of Greek and Roman antiquity, (2) the boundaries of ancient Greece and Rome, and (3) variant spellings. This was impliedly recognised by the proviso that in case of disagreement the problem of emendation should be determined by the International Commission.

Furthermore, it seems questionable whether the majority of zoologists who possess a classical training would be more offended, for example, at seeing the generic name Lavinia mis-spelled "Lavina" than at seeing the generic name Adinia mis-spelled "Adina". Yet one of these mis-spellings would be subject to emendation by subsequent authors while the other apparently would not. The determination of such matters might entail extensive and unprofitable expenditure of time.

In his recently distributed mimeographed paper entitled "The Emendation of Zoological Names," \* Dr. Curtis W. Sabrosky suggests three possible solutions to the problem of emendation. One of these he designates "The objective approach," although he expresses doubt as to the propriety of that designation.

I am convinced not only that this expression is exceedingly appropriate, but that the attainment of the highest-possible degree of objectivity should outweigh all other considerations in attacking this problem.

For that reason, I doubt the sufficiency of the primary rule thus expressed in the proposal of Blackwelder, Knight, and Sabrosky, as published in *Science*, 108, 9th July, 1948: 37–38, "The original orthography of a name is to be preserved unless it can be demonstrated in the original publication itself that there has occurred an inadvertent error, such as a lapsus or a copyist's or printer's error."

<sup>\*</sup> See Appendix 1 to Mr. Follett's letter of 24th July, 1952.

As so expressed, that rule immediately gives rise to the question, "Demonstrated in whose opinion?"

For many years, ichthyologists were unanimously of the opinion that the trivial name "equiselis" was a typographical error for "equisetis," yet a very old dictionary was eventually found to list both as variant spellings.

The AOU code for ornithology, which retains the original spelling, except for typographical errors, necessarily involves a subjective determination of what constitutes a typographical error.

With these uncertainties in mind, I have as yet found no means of expressing a thoroughly objective rule for the solution of this problem, except as follows:

"The original orthography of a scientific name shall be preserved, unless the International Commission shall emend it."

Such a rule would require a definition of "the original orthography" that would provide for variant spellings in an original description.

This subject is considered in Mr. Hemming's paper, where the suggestion is tendered that if a name as first published was spelled in more than one manner, the spelling that is selected by the first subsequent author who uses the name shall prevail, provided (a) the subsequent author is aware that more than one spelling was used, and (b) from these he selects one to be the spelling employed (pp. 49–50, par. 52). This is a modified version of the rule of the first reviser which was in effect for more than 40 years.

I realise that this presents an extremely controversial issue, and that a decision either way will be disapproved by many colleagues whom I hold in high esteem.

However, I regard Mr. Hemming's suggestion as objectionable upon the following grounds:

- (1) The rule of page precedence has already been substituted for the rule of the first reviser, by enactment of the 1948 Paris Congress. (Bull. zool. Nomencl., 4 (10/12), 1950: 330).
- (2) In the Nomenclature Committee's recent questionnaire, a majority (57 per cent.) of the members of the Society of Systematic Zoology who voted, chose to accept page priority from 1st January, 1954, onward. This percentage includes those who chose to accept page priority as always binding.
- (3) In the same questionnaire, 35 per cent. of the members who voted indicated that they had refused to adhere to the rule of the first reviser even when it was in effect.
- (4) The suggested rule prevents a determination of the original orthography from the original description.
- (5) The suggested rule requires a search of literature that may not be readily available.

- (6) The suggested rule inevitably involves a doubt as to whether the *first* subsequent author has in fact been found.
- (7) The suggested rule necessitates the subjective determination of what constitutes a "selection" by a subsequent author.

The rule of page, line, and word precedence would therefore seem preferable in determining which of two or more variant spellings is to be regarded as the original orthography.

Perhaps an express corrigendum, published as a portion of the same volume, should outrank position-precedence in establishing the original orthography, although it may be doubted that the question of what constitutes an express corrigendum can always be determined objectively.

In closing, I wish to emphasize Dr. Sabrosky's recommendation "that the final proposal on emendations treat all names on the same basis, regardless of date." I concur heartily with his statement that "varying treatments... for names or emendations before and after the effective date of the plan [would] add a great deal to its complexity..."

#### W. I. FOLLETT,

California Academy of Sciences, San Francisco 18. 18th June, 1952.

#### Enclosure 2 to Appendix 3

EXTRACT FROM THE MINUTES OF A SYMPOSIUM ON ZOOLOGICAL NOMENCLATURE HELD BY THE PACIFIC SECTION OF THE SOCIETY OF SYSTEMATIC ZOOLOGY AT THE OREGON STATE COLLEGE, CORNWALLIS, OREGON, U.S.A. ON FRIDAY, 20TH JUNE, 1952

Symposium: Problems of Nomenclatorial Practice now under consideration by the International Commission. W. I. Follett, presiding.

4. The Reform of Article 19 of the Règles Relating to the Conditions in Which Emendations of Scientific Names Should Be Made or Accepted. W. I. Follett, California Academy of Sciences, San Francisco.

Under the chairmanship of Dr. G. F. Ferris, discussion of this paper first centered around Dr. Follett's suggestion that the original orthography be preserved unless emended by the International Commission; and that, as between variant spellings in an original description, the original orthography should be determined by position-precedence, except (possibly) where an express corrigendum was published as a portion of the same volume.

Dr. Hedgpeth cited a pertinent case among the pectens, and Dr. de Laubenfels mentioned two cases among the sponges. In one of the latter, the variant spellings "Dusidea" and "Dysidea" occurred in the same paper; in the other, the spelling "Hircinia" was substituted for "Ircinia" in a subsequent paper after the lapse of one year.

Mr. Follett believed that a sacrifice of the automatic emendation of "evident" or "demonstrable" errors did not seem too high a price to pay for objectivity, and that he could see no manner in which a rule could be worded to permit automatic emendation in extreme cases without permitting a subjective interpretation of the "evidence" in other cases.

Dr. Usinger stated his preference for a rule that would permit the emendation of an "evident typographical error" without reference to the International Commission, or in the alternative, for the proposal of Blackwelder, Knight, and Sabrosky (mentioned in Mr. Follett's paper) that would permit emendation by subsequent authors if "it can be demonstrated in the original publication itself that there has occurred an inadvertent error, such as a lapsus or a copyist's or printer's error."

Mr. Follett stated that there is a considerable gradation of "obvious" errors, accompanied by varying amounts of "evidence" (direct or circumstantial) in the original description. Toward one end of the series might be placed the trivial name "hopiknsii." It was accompanied by "evidence" which "demonstrates" that the species was "named for Timothy Hopkins". Toward the other end of the series might be placed the trivial name "lahonton." It was accompanied by "evidence" which, it has been contended, "demonstrates" that the author intentionally chose the spelling "Lahonton" for Lake Lahontan. But it has also been contended that the accompanying evidence "demonstrates" that the spelling "Lahonton" was a lapsus or a copyist's or printer's error. The question which "demonstration" shall prevail appears highly subjective.

Dr. de Laubenfels mentioned two genera named for the same man, in which the name was spelled differently, and he pointed out the difficulty of "demonstrating" that the second spelling was not intentional.

Reverting to "hopiknsii," Mr. Follett suggested that to provide for the emendation of a name because it comprises an unpronounceable combination of letters would be to introduce a highly subjective criterion. One of the members concurred, with the remark that the personal surname "Krska" might be regarded by many people as an unpronounceable combination of letters.

Mr. Follett compared the problem of mis-spelled names to that of "inappropriate" names, and read Article 32 of the International Rules, which for many years has provided that "A generic or a specific name, once published, cannot be rejected, even by its author, because of inappropriateness. Examples: Names like *Polyodon*, *Apus*, *albus*, etc., when once published, are not to be rejected because of a claim that they indicate characters contradictory to those possessed by the animals in question." He stated that the trivial name

"texanus" was applied to a fish of the great Colorado River, possibly in the mistaken belief that it had been collected in the Colorado River of Texas; that one of the best-known fishes of North America, the blackbass, has been known for 150 years by the generic name Micropterus (meaning "small fin") because part of a fin of the holotype had been bitten off; and that both of these "inappropriate" names are in constant use, but seldom evoke comment.

Dr. Usinger asked what should be done with emendations established in the literature—which, in the nomenclature of insects, he estimated at about I per cent. of the described forms. Mr. Follett estimated such emendations in the nomenclature of Californian fishes also at about I per cent. of the described forms. He suggested that the dislodgment of any one of the established emendations would work no greater hardship than did the dislodgment of the established emendation "equisetis" when, after more than a century, it was "demonstrated" that the original orthography ("equiselis") was not a misprint but a variant spelling. He suggested further that this aspect of the problem seemed to present a simple choice between (1) original orthography and (2) usage—and that the question of what constitutes "usage" would seem to be highly subjective.

Dr. Usinger asked whether the definitions of the expressions "erroneous original spelling," etc., as proposed by Hemming (1952: 21, 47) appeared satisfactory. Mr. Follett replied that he considered them so, except that he concurred with the suggestion of Sabrosky (1952: 5) that the expression "erroneous spelling change" should be emended to "erroneous subsequent spelling," for the reasons stated by that author.

Dr. Usinger queried whether, under the rule proposed by Mr. Follett, there would be any need for the expression "valid emendation." Mr. Follett suggested that a "valid emendation" would be one effected by the International Commission.

Mr. Follett emphasized the difficulty of expressing an objective test that would determine (1) what constitutes "evidence" (direct or circumstantial) of error in an original description, and (2) whether there is a conflict within that "evidence."

Dr. de Laubenfels moved that Mr. Follett's suggestion that "The original orthography of a scientific name shall be preserved, unless the International Commission shall emend it" be approved by this body. The motion was seconded by Dr. Grace L. Orton. A showing of hands indicated 13 for and 4 against the motion, with one (Mr. Follett) abstaining. A check of SSZ members present, as distinguished from guests and visitors, showed 18.

Dr. Usinger then suggested that the Blackwelder, Knight, and Sabrosky recommendation, cited above, be recorded as the view of the minority. An objection to this was expressed by Mr. Stanley Mulaik, and Dr. John N. Belkin voiced his disapproval of the International Commission as final arbiter in any event.

JOHN S. GARTH,

Provisional Secretary.

#### Enclosure 3 to Appendix 3

#### LETTER, DATED 8TH JULY, 1952, from CURTIS W. SABROSKY TO W. I. FOLLETT

Many thanks for your letter of 1st July and enclosed manuscript. I am, of course, much interested in your paper because, as you know, I have spent a good deal of time and thought on that very subject.

I am in full accord with Usinger in desiring automatic correction of obvious errors where the evidence is in the original publication. It has been interesting to me, in view of the efforts by Blackwelder, Knight and myself to get an air-tight and yet a simple wording, that both you and Hemming have criticised our primary rule as being insufficiently objective. By "demonstrated in the original publication" we thought we were making it clear that the evidence had to be there, and not an argument based on private or esoteric information, on guesswork, on probability, or anything else. In our view, one could only demonstrate in the original if there was actual evidence there (as in the "hopiknsii" example). In order to strengthen the wording, we are proposing to add words to make it read "demonstrated by evidence in, etc." However, as I pointed out in my memorandum, Blackwelder, Knight and I came to believe that the simplest rule would be to preserve the original spelling in all cases, even as you concluded. But as a practical problem, we did not feel that zoologists would agree to it. If an author states that he is proposing a name to honour Carl von Linné, the great Swedish naturalist and author of "Systema Naturae," but the printed name is ninnei, then no rules on earth are going to prevent zoologists from changing it to linnei. We might as well face the fact. But, if the name was proposed as ninnei, with no indication of origin, then it would be impossible to demonstrate in the original publication that it should be anything else. As far as anyone could tell it would be an arbitrary combination of letters.

I disagree with your view that the first reviser rule in selecting which of alternate original spellings shall be used, is objectionable. I am an advocate of the third choice under proposition VI of the ballot sent to the SSZ, and to me Hemming's proposal for the treatment of alternate spellings was in one sense an admission of the justice of the first reviser rule: It gives an author a chance to use common sense and judgment, rather than to be mandatorily forced to accept the name which appears first on the page or first in the line. I would agree to using page priority whenever possible, but the existence of the possibility for independent action would be a saving grace.

Statement of the views of the

#### AMERICAN COMMITTEE ON ENTOMOLOGICAL NOMENCLATURE

Enclosure to a letter dated 28th July, 1952

- 1. It is recommended that emendations approved by the Commission in past *Opinions* be declared *res adjudicata* and be fixed, without prejudice to any future plan and without establishing precedent for any principle. Presumably these *Opinions* established usage in the cases covered, and no good would be accomplished by reversing them.
- 2. It is recommended that Article 20 be revised concomitantly with Article 19 because certain matters (diacritic marks, numerals, odd letters) are inevitably involved in the problems of both original and subsequent spellings. Article 20 is referred to briefly in paragraph 3 of the Secretary's report on Emendations. Some points have been treated elsewhere (e.g., Bull. zool. Nomencl. 4, pts. 7/9, pp. 198–200, 25th May, 1950, on actions of the Paris Congress), but not in direct relation to Article 19.
- 3. It is recommended that the Code contain strongly recommended (but not mandatory) schedules for transliteration from the classical Greek and Cyrillic alphabets, and schedules or suggestions for the formation of names, endings, use of connective letters, criteria for determining the stem of Greek and Latin nouns, and any other similar aids to the taxonomists. This is in line with a ruling of the Paris Congress (cf. paragraph 23 of Mr. Hemming's report on Emendations, Bull. zool. Nomencl., vol. 7, p. 25).
- 4. It is recommended that the final proposal on emendations treat all names on the same basis, regardless of date. Varying treatments for names or emendations before and after the effective date of the plan add a great deal to its complexity, and would contribute much to swamping the Commission with work in the future. In most cases, emendations show little difference in spelling and give rise to little or no confusion. In critical cases, or in cases affecting a whole class of emendation which would involve many names (e.g., the "my" stem that is a problem in names in malacology, mammalogy and Diptera), an application, suitably supported by evidence, could always be made to the Commission.
- 5. The American Committee on Entomological Nomenclature recommends the following rulings on emendations (modified from those of Blackwelder, Knight, and Sabrosky, 1948, *Science*, 108: 37–38).

Note by the Secretary: Here followed, in the statement furnished, the proposals drawn up by the Committee. These differ only in a few slight respects from the proposals submitted by the Nomenclature Discussion Group,

Washington, which form Annexe 1 to Document 5/30 and will be found on pp. 130–131 of the present volume. In these circumstances it has been considered that it would be more convenient to readers, if, instead of publishing at this point the full text of the Committee's proposals there were to be published an analysis showing in what respects the proposals submitted by the American Committee on Entomological Nomenclature differ from those submitted by the Nomenclature Discussion Group, Washington.

The two proposals discussed above are word for word identical, except in the following respects:—

- (1) "Section I. Original Spellings": The proposals of the American Committee are textually identical with those of the Nomenclature Discussion Group, except that the former body recommends that at the end of sub-section (a) there should be added the reference "(see Opinion 26)", and at the end of sub-section (b) the reference "(See Opinion 34)".
- (2) "Section II. Subsequent Spelling", Introductory Paragraph: At the end of the first portion of the second sentence the words "or are demonstrably so" have been added in the Committee's proposals after the words "originally stated to be intentional".
- (3) Section II, Sub-Section (a): In the Committee's proposals the expression "(valid emendations)", which appears at the end of this Sub-Section in the Discussion Group's proposals, are omitted.
- (4) Section II, Sub-Section (b): The expression "(invalid emendations)" at the end of the first sentence is similarly omitted in the Committee's proposals. In those proposals the next sentence opens with the words "Such invalid emendations", while in the corresponding sentence in the Discussion Group's proposals the word "invalid" does not appear.
- (5) Section II, Sub-Section (c): The two "Examples" which appear at the end of this Sub-Section in the Discussion Group's proposals are omitted in those submitted by the Committee.
- (6) Section II, Sub-Section (d): In the proposals submitted by the Committee, the second sentence differs slightly in wording from that in the proposals of the Discussion Group and reads as follows: "Wherever these occur, they are not to be treated either as errors or as emendations but as permissible variations". The sentence "As in Article 20, elimination of diacritic marks is recommended", which appears in the Discussion Group's proposals does not appear in those of the Committee.
- (7) Section II, Sub-Section (e): The "Example" which appears at the end of this Sub-Section in the Discussion Group's proposals is omitted in those submitted by the Committee.

(Intl'd.) F. H., 16th May, 1953.

### CONTINUATION OF STATEMENT FURNISHED BY THE AMERICAN COMMITTEE ON ENTOMOLOGICAL NOMENCLATURE

#### Discussion of I, Original Spellings

The above proposal would allow emendations, even by the original author himself, only when inadvertent errors "can be demonstrated in the original publication itself." Secretary Hemming agrees with the general purpose but believes the rule should be more objective, and he would limit automatic emendation to cases where the original author (or his editor) corrects the mistake in the same volume, or within twelve months. It is the intention, in supporting the above statement, to make the basis for emendation as objective as possible by allowing emendations only when the evidence of error appeared in the original publication itself, without recourse to esoteric information, or private or special knowledge.

Under our proposal, incorrect transliteration is not to be construed as an emendable error. In the Hemming proposal, it is in certain types of cases. If the trend away from classical knowledge has gone as far and as fast as the Secretary believes, it seems unnecessary now (and will become more so) to make the suggested exceptions; secondly, the exceptions and the varying treatments add much complexity.

Misuse of connective letters is also not construed as an emendable error in the above proposal. The Hemming proposal does not include this in the subject of emendations and Article 19, but considers it as an allied problem (cf. pars. 53, 54) to be the subject of a separate article. We oppose any mandatory articles on the subjects covered in paragraphs 53 and 54, but we recommend that those subjects be included with strong Recommendations in schedules. Infringements of those schedules are not construed as emendable.

#### Discussion of II, Subsequent Spellings

Emendations are defined above as "changes that are originally stated to be intentional, or are demonstrably so"; the Hemming proposal would limit them to the changes with stated intention. Perhaps the "demonstrably so" provision is not generally understood and may be impossible to interpret objectively, and if so it is weak. It is intended to cover such works (probably few in number) as Agassiz, in which there is no specific statement of intention with each emended name but in which the author is well known to have emended extensively and intentionally. It may be best to abandon the "demonstrably so" provision, and to provide in some other manner for such known works that have historically been considered to contain emendations.

We recommend changing Mr. Hemming's term "erroneous spelling change" to "erroneous subsequent spelling". The latter term will thus be directly comparable to the term "erroneous original spelling", and it would avoid the connotation of intent that "change" might have in some sentences.

Secretary Hemming does not seem to mention the question of whether errors can acquire validity by citation in synonymy; this point, which is small, but should be covered, is disposed of in our proposal. Likewise, diacritical marks and numerical prefixes are not clearly covered in the Hemming proposal. We believe they should be covered here.

It is further recommended that Article 20 be revised as follows (again modified from Blackwelder, Knight, and Sabrosky).

#### Article 20.

- (a) In forming new names, only Latin letters are to be used, regardless of the characters used in quoting the source from which the name is derived. The Latin letters in this sense are those of the classical Latin alphabet and the neo-Latin k, j, and w.
- (b) The use of diacritic marks (such as  $\ddot{o}$ ,  $\tilde{n}$ ,  $\emptyset$ ,  $\ddot{c}$ , and  $\acute{a}$ ) in forming names is optional, regardless of use in the source as quoted.

Recommendation: It is strongly recommended that, in forming new names, any diacritic marks be omitted or replaced by standard substitute letters (such as ue for the Germanic ü and aa for the Scandinavian å), as the use of diacritic marks by subsequent workers may be impracticable because of differences in type fonts.

- (c) Names may be formed with the numerical prefix. The prefix should be the combining form of the Latin word for the cardinal number, written in Latin letters, but if written with an Arabic numeral, the name is not to be rejected on that account.
- (d) The use of a symbol prefix to show the shape of a marking or structure is not recommended, but, if the symbol is in the form of a Latin letter, such names are not to be rejected.

American Committee on Entomological Nomenclature.

CHARLES D. MICHENER,
Secretary.

Statement of the views of the

#### ENTOMOLOGISCHE GESELLSCHAFT, BASEL

Extract from a letter, dated 30th July, 1952, from

#### M. HENRY BEURET

#### EMENDATIONS, BULL. ZOOL. NOMENCL., VOL. 7, PARTS 1/2, PAGES 1-59

Ne voyons rien de spécial à remarquer; sommes d'accord avec vos deductions et propositions.

By J. CHESTER BRADLEY (Cornell University, Ithaca, U.S.A.)

Statement received on 2nd August, 1952

## COMMENTS ON THE PLAN SUGGESTED BY SECRETARY HEMMING TO GOVERN THE EMENDATION OF ZOOLOGICAL NAMES (REFERENCE Z.N.(S.)356)

The plan is most carefully and logically worked out. With the exception of a few minor points I find it fully satisfactory provided the general course of action that it implements is wise. Let us examine the broader questions involved.

The plan is offered as a compromise between two irreconcilable points of view. The introduction states that the one viewpoint, that of the purists, is rapidly diminishing if not even dying out. We are building, we hope, for a long future. It is not wise to jeopardize the practical working of the Règles for the sake of compromise with principles which will be foreign to the viewpoint of that future. Will that be the result of the proposed course of action?

Since I am expressing personal judgment, it can perhaps be better weighted by others if I explain my own status. I make no claim to being a classicist, and yet as a schoolboy there were many long years in which my one great effort in life was to acquire what my instructors would accept as an adequate knowledge of Greek and of Latin. It grates upon my sensibilities to see zoological names that I perceive to be classically improper, just as it does to read or listen to obvious errors of English, or to perceive any other sort of crudity in persons of whom I should expect better. I was taught zoology by Professor Burt G. Wilder, to whom Darwin made reference in his Origin of Species. Dr. Wilder used to post notices to students in Greek, in Latin, and in other languages. Once he was lecturing to us on the garpike, Lepidosteus. With great seriousness he said, "Gentlemen, they tell me that we must now say 'Lepisosteus'; but gentlemen, I would rather say 'damnation' than to say 'Lepisosteus'!"

I sympathize with Professor Wilder. I should like to be able to say "Lepidosteus". But the end sought is not worth the penalty if it either prevents harmony among zoologists, or subjects them to an intolerable and impractical degree of searching the etymology of the names that they employ.

We grant to zoologists the right to employ barbarous words; we grant the right to use any arbitrary combination of letters, and these rights are not challenged. Is it not quite illogical to rule that a name that simulates \* a classical word or a transcription of one, must be changed if not spelled in accordance with certain rules?

It would be wise to establish the principle that the decision of the author is normally paramount. As applied to the past, this should be tempered by continuity: we should not dig out original spellings such as "Lepisosteus" and "Orussus" and force them to supplant established emendations. Here I am quite content with the course proposed by the Secretary—that such cases be referred to the Commission for decision.

As applied to the future, exception to the decision of the original author would better be made only by the Commission, and then only on the grounds of flagrancy.

It is my intent that the two paragaphs preceding should apply to emendations in the broadest sense, as defined by the Secretary in his proposals, inclusive of "spelling change" and "error of transliteration".

It seems appropriate that the Règles should call attention to the grave responsibility that rests upon every author proposing a new name, if he intends basing it upon a pre-existing word or words in any (but especially in a classical) language, to form it and if need be to transliterate it, in accordance with the rules that the Romans would have used. It should be made clear that this is a matter of good taste, and one upon which the author's reputation for scholarliness depends. It should be made clear that it is also important in order to avoid giving offence to other zoologists. It would be wise to urge authors who find themselves unacquainted with the classics to consult some classical scholar before venturing to compose a new name, other than an arbitrary combination of letters. It is appropriate that Schedules attached to the Règles should give assistance to those who are not classically trained. This help should include not only matters of gender and transliteration but also instruction in how to use a lexicon in order to find a stem, how to compound words and in the use of prefixes and suffixes.

Our responsibilities go no further. The author should have the final power of decision.

At Paris rules were adopted, some provisionally, to provide for automatic correction of certain incorrectly formed names. Among these were:

- (1) Names differing from the surname on which they are based.
- (2) A name founded on one or more Greek words but incorrectly transliterated.\*
- (3) Names based on mis-spelt Greek words.

<sup>\*</sup> Paragraph 43 provides that if there is disagreement among zoologists as to whether a name was intended to be based on a Classical Personage or classical place-name, the Commission shall decide what is to be done, but no objective method and decision is set up. By the same token every instance in the old Regles requiring subjective decision could be thrown into an overworked Commission for decision.

(4) Names based on mis-spelt geographic names.

(5) Barbarous words formed as adjectives, but ending in -ius or -ia.

(6) Names based on barbarous words but incorrectly spelled, including omission of necessary diacritic marks.

(7) A modern patronymic generic name not formed in accordance with the precepts of Art. 8, Recommendation sec. h, headings alpha, beta and gamma.

(8) A trivial name based on a modern surname, on a forename, on a name of antiquity, or on a geographical name when not formed in accordance with certain precepts.

These rules are theoretically excellent, and provide for future authors clear guidance for the formation of new names.

If, as contemplated, we require that they be applied to all names, past and future, the task involved becomes so erroneous that in my judgment zoologists simply will not even attempt to live up to it.\*

The derivation of innumerable names is a matter of conjecture and subjective opinion. Even to make certain that they are based on classical words is not possible. Can the Commission give an answer as to what constitutes correct spelling of every classical word? Homeric Greek differs from Attic, but there is nothing to prevent an author adopting a Homeric form, if he prefers it. Many Latin words occur in the lexicons with variants, which cannot be ruled out; ex. gr. larvalis, or larvalis, or larvalis. A zoologist encountering one of the latter two forms might readily jump to the conclusion that it was a mistake in spelling. The Latin lexicons available to the average zoologist deal with the Latin of the Romans and do not touch the language of the learned of the Middle Ages—yet the latter is not ruled out. Furthermore they give merely clues to the "ancient world of words of whose existence we are aware only upon the authority of the old grammarians and lexicographers." All languages are continually evolving. Latin as a language did not stop at 476 A.D., but it gradually evolved into the neo-Latin dialects the chief and purest of which is modern Tuscan. These are subtleties for the most learned scholars of languages to deal with, not for zoologists.

Paragraph 44 deals with names based on non-classical place-names. It cites examples to show that variation in spelling such names does occur. However, the extent of variation appears to be far under-estimated. Com-

<sup>\*</sup> The decision says "inadvertently transliterated erroneously". This requires a subjective decision as to whether the author purposely or inadvertently used the spelling that he did—which is another complication.

<sup>\*</sup> Take two provisions alone, those dealing with mis-spelt Greek and barbarous words. Think of the plight of a zoologist with no knowledge of Greek, perhaps even unable to read the Greek alphabet. Before he can use any Greek-based name with confidence, he must first determine what Greek words are involved in the name. In a high percentage of cases this is impossible to accomplish with certainty, even by a classicist. Then he is required to determine whether an error of spelling has been made.

Again: How many zoologists have sufficient linguistic practice in general to determine in the first place that a name is based on a barbarous word, then from what language it has been taken, and finally what is the correct spelling of that word?

parison of English, German, French, Italian, Spanish, Portuguese and Slavic atlases shows that even the commonest place-names are spelled differently in each, according to the slant of the language of the country in which the atlas is published. Who is to rule which spelling is acceptable and which are to be automatically rejected? Who will decide between Brasil, Brazil, Brèsil? Perhaps the answer is "According to the language of the nation that governs the place." But governments change. What was yesterday part of Germany is today Poland, with Slavic place-names. Colonial possessions are especially apt to change hands. What zoologist can keep track of all these things, and have access to all national spellings of place-names that are or have been used? Conflicting spellings in the same language are frequent, and this especially is so in attempts to phonetically reproduce native names. The Okefinokee Swamp in Georgia has run through a gamut of changes. I have myself named a wasp after a locality close to Ithaca which on the railway schedules appears as Taughannock, but on many maps as Taughanic. The United States Geographic Board is continually ruling on the proper spelling of place-names, but few foreign zoologists have ready access to their findings. Who among thousands of such cases can say that this or that spelling not only is wrong but was wrong when adopted by an author for a zoological name?

Even names based on those of persons cannot always be so readily settled as would at first appear. It is quite possible to assume that the person involved was quite another than the one the author intended, as has been pointed out recently by Sinclair.

From a practical point of view the important thing is to have a fixed spelling that can be found with ease and used by all alike. I am vividly aware of the desirability of having each name acceptable from the viewpoint of a classical scholar; but to attempt to enforce that it be so, will bog zoologists in a quagmire from which they cannot extricate themselves. Therefore, although at hasty first thought in Paris I accepted the eight regulations listed above as desirable advances, I now, after much longer and more careful consideration see that they were not, and conclude that:

- (1) In all cases in which at the time of the original publication of a name its author neither directly named the word or words from which it was formed, nor gave direct evidence that it was dedicated to a particular person by naming that person, nor that it was based on a particular geographical name by quoting that name, the original spelling shall be accepted as the correct spelling.
- (2) By way of compromise with the classicists, I think that most of the practical difficulties to which I have referred would disappear in any case where the original author did or does definitely state the word or words, classic, barbaric, personal or geographic, on which the proposed name is based, quoting them in the original alphabet when not Latin. This however, would only apply in case it be agreed that the spelling

of such word or words adopted by the original author shall be accepted as correct (by reason of giving him the right to choose). If this were done I am inclined to think that I would not object to obligatory spelling correction to the extent of remedying any error of transliteration of the word stated by the author to be the basis of his name, or any error in applying it to them or its or their spelling to the formation of the name.

This conclusion must be further qualified by stating that it is intended to refer only to the types of error that come under the eight provisions previously quoted. It is not suggested that we recede from our position in regard to the necessity of correcting certain other types of error, either those for which it has been provided that the name dates only from when introduced in correct form (ex. gr. a trivial name introduced as an adjective in the genitive) or the other rules for which it has been provided that the name dates from when first introduced in incorrect form (ex. gr. an error of capitalisation, or an adjective trivial name that does not agree in gender number and case with the generic name that it modifies).

#### The Expression "Erroneous Spelling Change" and certain proposed definitions

The expression "Erroneous spelling change" may cause much confusion because capable of diametrically opposite meanings, which can be demonstrated by insertion of hyphens:

Erroneous—spelling change, meaning a change (presumably a correction) of an erroneous spelling.

Erroneous spelling-change, meaning an erroneous change of spelling.

The more satisfactory expression might be "change of erroneous spelling". If, however, it is desirable to shorten it to three words, then I believe that the first two should be hyphenated, since not only is the meaning thereby fixed, but because the two words "erroneous spelling" are in effect a compound adjective that jointly modify "change", and, like any adjective, answers the question "what kind of change?"

The definitions of "Error of transliteration" and "Spelling mistake" (p. 54) are contradictory, because that of the latter specifically excludes "Error of transliteration", whereas that of "Error of transliteration" defines it as a kind of "spelling mistake".

"Emendation" is defined in brief, as any intentional change of spelling; "Erroneous spelling change" is any change in spelling other than an emendation. But since the only change of spelling that is not an emendation (by the definition just quoted) is one that is unintentional, one could only interpret the definition of "erroneous spelling change" to mean "Any unintentional change in spelling".

By W. E. CHINA, M.A., D.Sc. (British Museum (Natural History), London)

Extract from a letter dated 20th August, 1952

#### EMENDATIONS (REF. Z.N.(S.)356)

I have read through the Bull. zool. Nomencl., Vol. 7, parts 1 and 2 dealing with the emendation of scientific names and in general I am in agreement with your proposals. I particularly agree with you in paragraph 26 (p. 29) lines 9–14. There is still a large number of genera based on Greek words which strictly speaking have been wrongly transliterated. If by automatic regulation all these generic names were changed to the correct transliteration, wholesale changes would have to be made involving even family names. Many generic names ending in -a should end in -um. Thus Belostoma in the Belostomatidae (Hemiptera Heteroptera) should strictly speaking be Belostomum thereby changing the family name from Belostomatidae to Belostomidae. Personally I should favour a regulation freezing all generic names wrongly transliterated which had not been emended by a certain date, say the last day of the year in which the next Zoological Congress at Copenhagen, is held.

By H. B. WHITTINGTON (Department of Invertebrate Palaeontology, Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.)

Enclosure to a letter dated 26th August, 1952

#### THE EMENDATION OF ZOOLOGICAL NAMES

In the interests of stability I am opposed to any emendation of a published zoological name. I would like to see the first spelling of the new name, be it in the title, abstract, or main body of the paper in which it first appears, regarded as the correct one; this provision to apply whether or not the name is spelled differently elsewhere, or even everywhere else, in the paper. It is desirable that a zoological name be pronounceable with reasonable ease, and such a provision might give rise to cases in which this was not so, but I do not consider this an insuperable objection. A name is a label for convenience of reference, and emendation of the spelling for the reasons usually advanced seems to me irrelevant to the purpose of the name.

By OTTO H. HAAS (The American Museum of Natural History, New York)

#### Letter dated 22nd September, 1952

Having been out west on field work for several months, I had only recently an opportunity to study your elaborate proposals on The Emendation of Zoological Names in vol. 7, pts. 1/2, of the *Bull. zool. Nomencl.* 

Complying with your invitation, I am hereby submitting the following comments:

(1) I cannot quite agree with your opinion that the phrase "à moins qu'il ne soit évident que ce nom renferme..." in Art. 19 of the Règles introduces a subjective element. I rather believe that the word "évident", just as its English equivalent "evident" = "obvious", indicates that the situation is required to be such as to make it clear prima facie and beyond any doubt that a "faute de transcription, d'orthographe ou d'impression" did occur, thus not leaving any room for subjective judgment. Thus, the present wording of Art. 19 seems to me to mean essentially, but more emphatically, the same as the word "clearly" in your sentence (p. 17, 3rd to 5th line): "All names which failed clearly to fall within the provisions ...".

The divergence of opinion here pointed out concerns, however, only part of the motivation of your proposals, without in any way affecting these proposals, themselves.

- (2) I see no reason why "invalid emendations" should be granted the nomenclatorial status proposed in your paragraph 19 (p. 22). I rather strongly feel that they should not be granted such status any more than "erroneous original spellings".
- (3) I wonder if the expression "Erroneous original spelling", as proposed in pp. 47 and 54, covers mistakes due to ignorance as well as those due to error. The term "Erroneous or otherwise faulty original spelling" would leave no room for doubt in this respect.
- (4) Similarly, "Spelling mistake" should in both these places be defined as "Any erroneous or otherwise faulty spelling, other than...".
- (5) In view of the fact that trivial names are often derived from the names of districts, areas, regions, countries, and even continents and oceans, as well as from those of places, it might be advisable to replace "place names" throughout by "geographic names".

- (6) The proposals made in paragraph 42 for the names of places in the Roman World should, I believe, be extended to the Latinized names of modern places, e.g., Berolinum, Londinium, Lugdunum, Lutetia, Vindobona.
- (7) In the case, mentioned in paragraph 52, of a divergence between the spelling in the text and that in the legend to a plate, the former, unless obviously erroneous or otherwise faulty, should automatically take precedence.
- (8) The provision of paragraph 56 (10), should not be restricted to trivial names but be extended to generic ones as well. Thus, a ruling on a generic name would automatically cover also all the generic names formed by adding a prefix like "Eo-", "Neo-", "Pro-", "Epi-", "Para-", "Meta-" etc. to the former.

By HENNING LEMCHE (Universitetets Zoologiske Museum, Copenhagen)

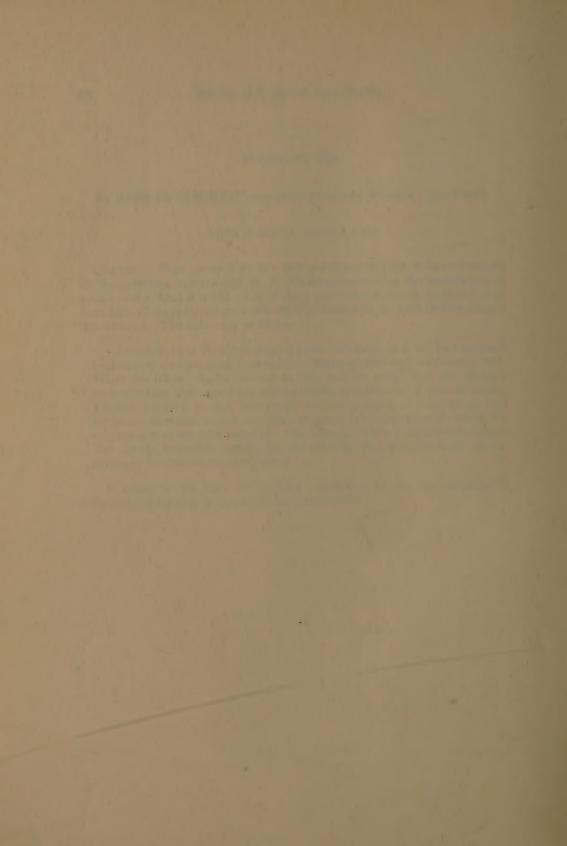
Letter dated 7th January, 1953

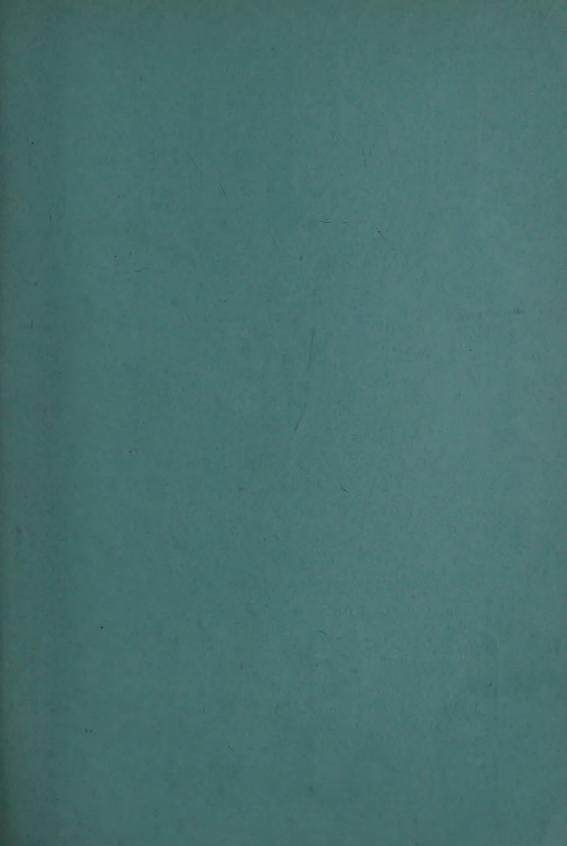
In the J. Wash. Acad. Sci., 42: 297, published in 1952, I find a footnote by the American malacologist W. K. Emerson concerning the emendation of names, and I think it worth while to draw your attention to it, so that it may form part of the material on which the Commission is to work in Copenhagen this summer. The note runs as follows:—

The changes in the  $R\grave{e}gles$  made by the 1948 meeting of the International Commission on Zoological Nomenclature became effective 1st January, 1951. While the official  $R\grave{e}gles$  are not at this date in print, it is the author's understanding that under the revised  $R\grave{e}gles$  emendations of generic names, whether justified or not, preoccupy for the purpose of homonyny, and erroneous emendations are available as junior synonyms in cases where the original names are later rejected. This change creates a rather unfortunate and nearly infeasible system for determining the next available junior synonym in cases of rejected names.

It seems to me that the problem mentioned in the last sentence is sufficiently important to require some consideration.







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